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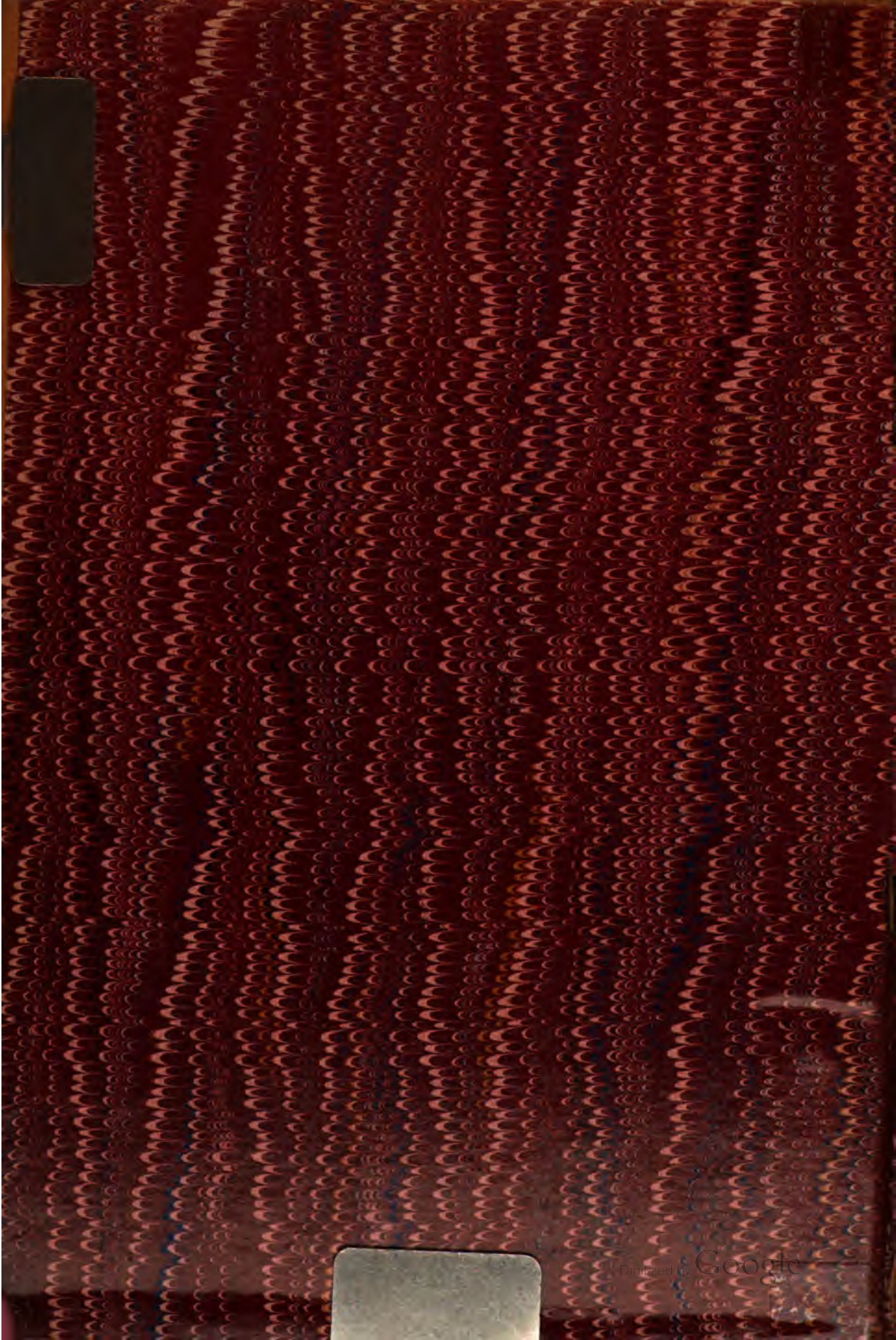
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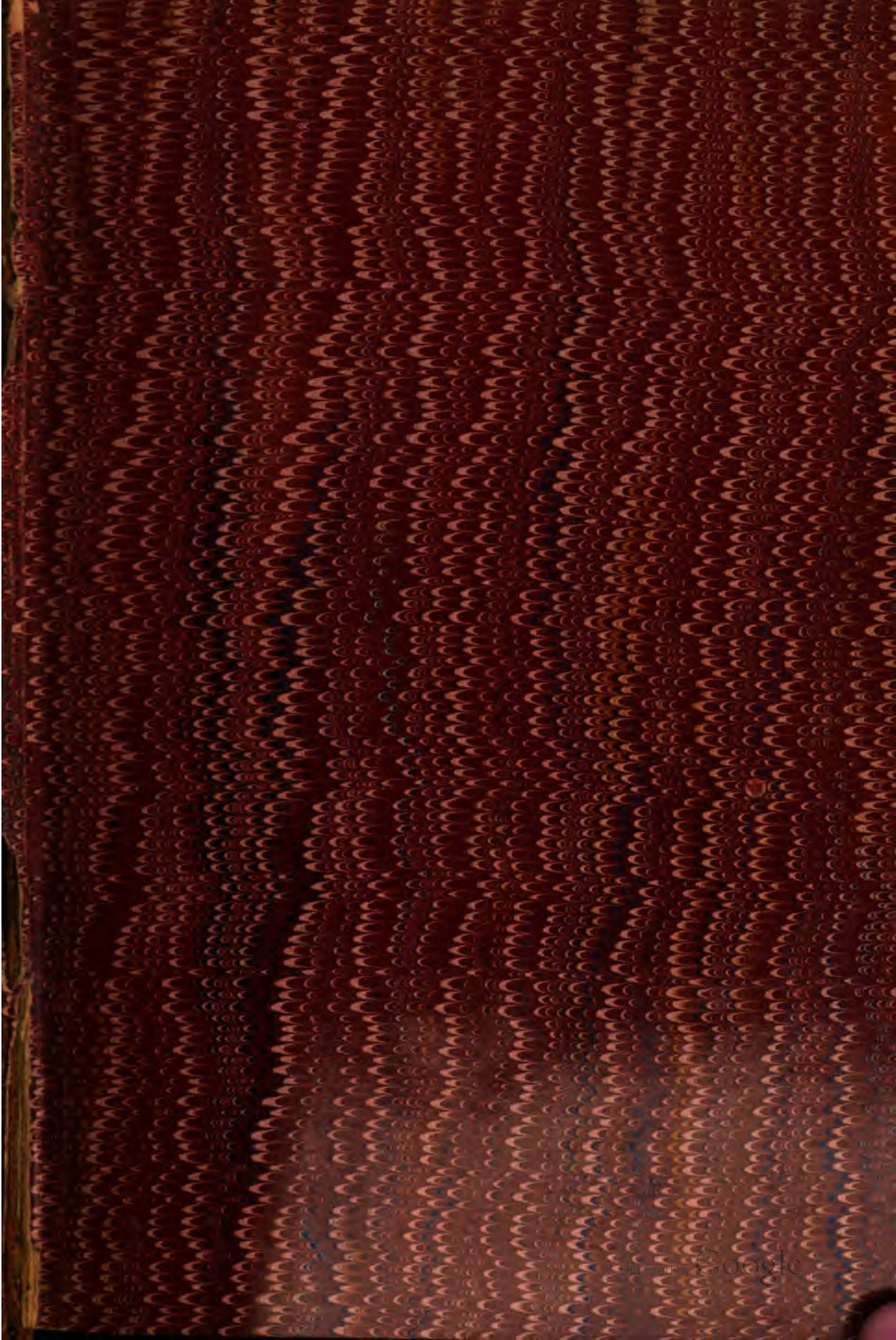
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EDWARD VII OF ENGLAND.

APPLETONS'
ANNUAL CYCLOPÆDIA

AND REGISTER OF IMPORTANT EVENTS
OF THE YEAR

1900

CONTAINING: POLITICAL, MILITARY, AND ECCLESIASTICAL AFFAIRS;
GENERAL DOCUMENTS; BIOGRAPHY, STATISTICS, COMMERCE,
AND AGRICULTURE, LITERATURE, SCIENCE, AGRICULTURE,
AND MECHANICAL INDUSTRY

THIRD SERIES, VOL. V

WHOLE SEVEN, VOL. XL



NEW YORK:
D. APPLETON AND COMPANY
1900

1901



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ANNUAL CYCLOPÆDIA

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WHOLE SERIES, VOL. XL



NEW YORK
D. APPLETON AND COMPANY
72 FIFTH AVENUE

1901

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P R E F A C E .

THE present volume has a peculiar interest in that it records the history of the closing year of the greatest of all the centuries—the century of steam, electricity, photography, and anæsthetics; of railways and telegraphs, sewing machines, typewriters, telephones, phonographs, armored ships, and smokeless powder. Many readers, on opening the volume, will naturally turn first to the article entitled “Nineteenth Century, Important Events of the,” where they will find a rapid chronological survey, showing—not, indeed, everything that has happened since the death of George Washington, but the principal significant and suggestive events. And this is supplemented by a review of the events of Queen Victoria’s long reign, which closed with the century.

Among the beneficent advances of the closing years of the century none is more worthy of note than the now widespread practice in the care of the sick of supplementing the skill of the physician with the skill of a specially educated nurse. This subject is treated fully in the present volume under the title “Nurses, Trained.” And a similar interest attaches to the growing habit of giving liberally for the endowment of charitable, religious, and educational institutions. What was done in this way in 1900 may be seen by a glance at the article “Gifts and Bequests.” Another advance of recent years is set forth in “Visual Instruction,” a subject here presented in cyclopædic form for the first time. The greatest examples of visual instruction are afforded by the world’s fairs, now so common that not many years pass without one. The beautiful exposition held in Paris in 1900 is here described, with illustrations.

At the same time, instruction by alphabetical means has progressed at its usual pace, and we present an interesting article on the public libraries of the United States, written by a veteran in the service, which is full of significant statistics, and is illustrated with portraits of some of our most eminent librarians. Our circulating libraries still show a preponderance of fiction, though the proportion of this to more solid reading is steadily decreasing; and in the book world the past year has been marked by phenomenal sales of half a dozen novels. This curious occurrence is discussed by an able critic under the title “Fiction, American.” There is also a development of education which is attained by reaching backward through the centuries and reading the monuments of vanished races. Those who take an interest in this will look at our regular article on “Archæology” and also at the special article on the “Congress of Christian Archæology.”

The regular articles on the great religious denominations, showing their growth and work in the year, are full as usual, and to them is now added the new one on “Christian Science.” Whatever any one may think of this manifestation, its believers and supporters are now so numerous and so definitely organized that it can

not be ignored by a faithful chronicler of the time. Those who are curious as to its history should read not only the article "Christian Science," but that entitled "Metaphysics, American," which also is in this volume.

The material and scientific advances are recorded in the regular articles on "Chemistry," "Metallurgy," "Physica," and "Physiology"; and the reader should look also at the special articles on "Explosives," "Steel Cars," and "Voting Machines," and perhaps at the curious array of information under "Gold Nuggets."

The notable event of the year in the United States was the presidential election, of which a full account is presented, with the platforms of all the parties that entered into the contest. The usual decennial Federal census was taken in June, and the population figures will be found in the articles on the several States, showing the population of each county. Very few of the other results of the census have been compiled, and therefore they can not be presented in this volume. From this subject we are naturally led to the Australian colonies, which have just federated themselves in a union closely modeled on that of the United States. The story of the federation, which went into effect Jan. 1, 1901, is told at length in "Australasia."

England has a new monarch, and we give a full-page portrait of him and a brief sketch of his life in the article on his kingdom. And last year England lost one of the most picturesque and original of all her authors and one of the most interesting of men—John Ruskin, of whom we present an extended biographical sketch, largely in his own words, and a beautiful portrait. Our own country lost one of its ablest statesmen and financiers in John Sherman, and the story of his life is here told by his friend and assistant secretary of the treasury, with a full-page portrait engraved for this work. There are also sketches and portraits of the new Vice-President and the new Speaker of the House of Representatives.

Among the eminent dead of the year, of whom sketches may be found in this volume, accompanied in some instances by portraits, are the actors Charles H. Hoyt, Edward S. Marble, and Frank Mayo; the artists William H. Beard, Francis B. Carpenter, Frederick E. Church, Jasper F. Cropsey, Thomas Faed, John S. Sargent, and William L. Sonntag; the authors Richard D. Blackmore, Clarence Cook, Stephen Crane, Archibald Forbes, Lucretia Hale, Richard Hovey, James Martineau, Moses Coit Tyler, and Charles Dudley Warner; the clergymen Cyrus A. Bartol, Thomas K. Beecher, A. J. F. Behrends, Edward McGlynn, Richard S. Storrs, and Richard H. Wilmer; the educators Henry Barnard, Charles F. Dunbar, Sigmund Fritchel, Burke A. Hinsdale, Joseph Jessing, George W. Northrup, Olaf Olsson, and William L. Wilson; the jurists Cushman K. Davis, William C. Endicott, and David M. Key; the naval officers John W. Philip and Montgomery Sicard; the physicians William A. Hammond, Oliver P. Hubbard, Lewis A. Sayre, Edwin O. Shakespeare, and Alfred Stillé; the scientists Frank H. Cushing, Thomas Egleston, James E. Keeler, St. George Mivart, and Fairman Rogers; the soldiers William W. Averell, Zenas R. Bliss, Gustave P. Cluseret, Jacob D. Cox, Petrus Jonbert, Emerson H. Liscum, and John G. Parke; the statesmen Count Benedetti, John A. Bingham, Paul Falk, John J. Ingalls, Edward John Phelps, and the Duke of Argyll; the capitalists Collis P. Huntington and Henry Villard; the journalist Oswald Ottendorfer, the circus performer Dan Rice, the chess player William Steinitz, and King Humbert of Italy.

The illustrations include two colored plates, four full-page pictures in black and white, and an unusual number in the text.

The volume closes with an index covering this and the four that preceded it.

NEW YORK, April 4, 1901.

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THE ANNUAL CYCLOPÆDIA.

A

ABYSSINIA, an empire in eastern Africa, known also as Ethiopia. The ruler, whose title is *Negus Negusti*, meaning King of Kings, is Menelek II, originally King of Shoa, who established himself on the throne with the aid of arms and munitions furnished by the Italians after Johannes II, his predecessor, had been slain in a battle with the dervishes. He signed a treaty at Ucciali on May 2, 1889, under which Italy claimed a protectorate over all Abyssinia as well as sovereignty in the territories north of Tigre and inland from Massowah, which before the

ritory all the country north of the Mareb, Balesa, and Muna rivers.

Ethiopia proper comprises the kingdoms of Tigre, Amhara, with Gojam, and the powerful kingdom of Shoa. The dependencies extend into Somaliland as far as Harrar, and to the west and southwest the present Negus has made efforts to establish his dominion over the Gallas and the tribes beyond to the borders of the already occupied parts of British East Africa and to the White Nile.

The area of the empire is estimated at 150,000



ADNA, CAPITAL OF TIGRE.

Italian occupation were dependencies of Abyssinia. The protectorate was denied by Menelek, whose troops, on March 1, 1896, defeated at Adowa an Italian army that invaded Tigre and Amhara, and on Oct. 26, 1896, through the mediation of Russia, a new treaty was signed at Adis Abeba, by which Italy renounced the protectorate over Abyssinia, and Menelek recognized as Italian ter-

ritory all the country north of the Mareb, Balesa, and Muna rivers. The population at 3,500,000. The Negus has a regular army of about 150,000 men stationed in garrisons in various parts of the country, supplemented by irregular forces and territorial levies.

The Abyssinians are Christians of the Alexandrian rite, whose ecclesiastical chief, called the *abuna*, is always a Copt, appointed by the Alex-

andrian patriarch. The *echegheh*, who presides over the monastic establishments, which contain about 12,000 monks, possesses more real authority. Jewish ceremonies, survivals of an early conversion to Judaism, are mingled with the Christian rites. The ruling caste shows an admixture of Hebrew and Arab blood.

The natives raise cattle, goats, and sheep in great numbers. Tillage is not much practiced, although the soil is fertile. Sugar and cotton are easily grown, and the vine and the date palm thrive, while the coffee plant is a native of the country. The chief products for export are hides and skins, civet, coffee, and wax. Gold and ivory are royal monopolies. Barley, millet, and wheat are raised for domestic consumption. The chief imports are cotton goods of English, American, and Indian manufacture, wool and woolen goods, cutlery, and matches. The Maria Theresa dollar has been the current coin for more than a century, and Menelek has had pieces of the same weight coined with his own effigies. The most populous town is Ankober, in Shoa, with 7,000 inhabitants. The French are building a railroad from Jibouti to Harrar, to which place a telegraph has been erected from Adis Abeba, the present residence of the Negus. As the result of negotiations that have been in progress since 1891 the French minister to Rome, M. Barrère, and the Italian Minister of Foreign Affairs, the Marquis Visconti Venosta, signed on Jan. 24 a protocol delimiting the French and Italian possessions on the Red Sea littoral. The frontier line, starting from the extremity of Ras Dumeira, follows the water parting for some distance inland, and then turns in a southwesterly direction so as to leave within Italian territory the caravan routes leading to As-sab, in Aussa. The contracting parties leave for future settlement the question of the small islands opposite Ras Dumeira, both undertaking to oppose any attempt of other powers to occupy the islands. Capt. Ciccodicola, the Italian resident at Adis Abeba, came to a settlement of the Italo-Abyssinian boundary question with the Emperor Menelek, who agreed to the retention of the Mareb, Belesa, and Muna line, thus sanctioning the Italian possession of a considerable portion of the Abyssinian plateau. The Abyssinian frontier along the British possessions in East Africa has been strengthened by the occupation and administration of the country bordering on the equatorial provinces and on Lake Rudolph by Europeans in the employ of Menelek, led by Capt. Leontieff, a Russian, who with a force of Senegalese soldiers erected forts at the principal strategic points. The Mohammedan tribes in Ogadayn, roused by a so-called Mahdi, rebelled, but were routed, on March 19, at Digdiga, with a loss of nearly 3,000 men, by Benti, the Governor of Harrar, who lost only 21 killed and wounded. The prompt arrival of re-enforcements from the Negus further checked the rising and prevented it from extending into Somaliland.

AFGHANISTAN, a monarchy in central Asia, lying between Russian Turkestan and British India. The ruler, or Ameer, is Abdurrahman Khan, who was placed on the throne in 1880 by the British after they had occupied Cabul, the capital, and driven out Yakub Khan, the son of Shere Ali, the preceding Ameer. The Indian Government has since paid an annual subsidy, first 1,200,000 rupees, and in 1893 increased to 1,800,000 rupees, to enable Abdurrahman to consolidate his power and preserve a strong, united, and independent Afghanistan as a buffer state between the Russian dominions and India. The military forces of the Ameer consist of the feudal militia and his

regular army of about 20,000 men. The artillery has 76 modern guns, and in the arsenal at Cabul are manufactured gunpowder, cartridges, rifles, and cannon with modern machinery. The boundary between Russian and Afghan territory starts at a point in the Kwaja Amran range, runs first westward to the peak of Kohimalik Siuh, southwest of the Helmund, thence northward to Zulfi-kar, on the Heri Rud, thence northeastward to Khamiab, on the Oxus; this river it follows up, and the Panjah, its longer, southern branch, to Lake Victoria, from which it runs eastward to a point in the Sarikol mountains, which form the boundary of Chinese Turkestan. The boundary between Afghanistan and India as finally demarcated leaves Chitral, Bajaur, and Swat within the British sphere and Waziristan in the east, while Afghanistan retains Kafiristan and Asmar, with the Kunar valley. The area of the Ameer's dominions is estimated at 215,400 square miles. The population is about 4,000,000. The taxes, levied in kind, are from a tenth to a third of the produce, according to the benefit derived from irrigation. The revenue, estimated under a former Ameer at \$3,600,000, is subject to fluctuations. The cultivators raise wheat, barley, beans, peas, etc., as a winter crop and plant rice, millet, or maize in the summer. Fruits are abundant and fine, and are the principal food of the people. Preserved fruits are exported to India. Other exports are nuts, asafoetida, madder, castor oil, carpets, and other manufactures of wool and camels' hair, felt, silk, postins, or sheepskin coats, tobacco, cattle, hides, and rosaries. The chief imports are cotton goods, indigo and other dyes, sugar, and Chinese tea. The trade is with British India and with Bokhara and Russian Turkestan, but there are no statistics of the amount.

At the beginning of the year a detachment of Russian troops arrived at Kushk, the terminus of the Russian railroad to the Afghan frontier, having been only a week on the journey from Tiflis. The sending of re-enforcements to the new fortress at Kushk was regarded as a menace to Herat. All the materials for a siege train to be held in readiness for a rapid advance to Herat were accumulated at Kushk. The demonstration was intended, perhaps, as a warning to England not to extend the Indian frontier, an advance beyond the Raskem mountains north of Kashmir having been contemplated.

The attitude of the Ameer toward Great Britain since the conquest of the Afghan tribes on the northwest frontier of India, while outwardly friendly, has been far from cordial, and by commercial regulations he has endeavored to isolate Afghanistan from India as far as possible. By the imposition of heavy duties and prohibitory regulations he almost extinguished the trade with India by Dakka and the Khaiber pass. In 1900 he created a monopoly in postins, asafoetida, almonds, and pomegranates, having already prohibited the export of horses and mules and the import of Indian salt. The tax on the exportation of sheep was placed so high that the number sent to India fell from 16,000 to 6,000 in the first year. To the representations addressed to him by the Indian Government Abdurrahman paid no attention. The Englishmen who were formerly in his service he has dismissed one after another, and the factories and arsenals go on without them. His political relations with Russia were not more intimate than before, though trade with Asiatic Russia was not checked by artificial barriers as was the Indian trade. Since the Afriidi campaign the Ameer has devoted himself to increasing the efficiency of his regular army. More regiments

have been raised and a reserve has been started. The export of grain has been rigorously prohibited, and large military granaries have been built and filled at Cabul, Candahar, and Herat. The transport arrangements have been completed by the purchase of many thousand horses so as to place the army on a war footing. The troops are well armed with breechloaders, several thousands with magazine rifles.

AFRICA, SOUTHERN, COLONIES IN. The Cape of Good Hope, which was first settled by the Dutch and the Huguenots in the seventeenth century, was taken from the Netherlands by the British in 1806 and was formally ceded to Great Britain in 1815. Many descendants of the original settlers who were unwilling to accept British rule migrated in 1834 and 1835, and beyond the Great Fish river, which was then the eastern boundary, founded an independent commonwealth in Natal; others crossed the Orange river, which had been declared the extreme northern boundary of the British possessions, and in 1837 established the settlements that were declared independent and organized into the Orange Free State, which was recognized by Great Britain in 1854. In the meantime Great Britain annexed the Natal settlements, whereupon a majority of the Boer colonists abandoned their farms and, joining others who had settled on the farther side of the Vaal river, established in 1849 the new commonwealth called the Transvaal Republic, whose independence was acknowledged by the British Government in 1852. Natal was separated from Cape Colony and erected into a colony in 1856. British Kaffraria was incorporated in Cape Colony in 1865, and Tembuland, East Griqualand, and the Transkei territories were annexed in later years; also the harbor of Walfisch Bay, on the southwest coast. Griqualand West, originally a part of the Orange Free State, was annexed by Great Britain as a result of the discovery of diamond mines in the vicinity of Kimberley, and it also now forms an integral part of the colony of the Cape of Good Hope. Basutoland was annexed to Cape Colony in 1871, but after the Basuto war it was detached and made a direct dependency of the Crown in 1884. In that year Germany declared a protectorate on the southwest coast of Africa over Damaraland, extending from Cape Frio, the southernmost point of Portuguese West Africa, to Walfisch Bay, and over Namaqualand, extending from Walfisch Bay southward to the Orange river, which forms the northern boundary of Cape Colony. Great Britain occupied the South African or Transvaal Republic in 1877 in consequence of internal dissensions among the burghers. They rebelled in 1880, expelled the British officials and drove out the garrison, defeated the first detachment of troops that were sent against them, and a new Government in England, presided over by Mr. Gladstone, made peace in 1881 on the basis of the restoration of their independence in internal affairs, reserving the suzerainty of the Queen, including the right to maintain a British resident, the representation of the Transvaal Republic in its foreign relations, the right to move troops through the country, etc. In 1884 a new convention was signed in London, from which the word suzerainty was omitted, the old name of South African Republic was recognized once more, the British resident gave place to a diplomatic agent, and the only right reserved by Great Britain was that of vetoing any treaty made by the South African Republic with foreign powers or with native tribes, six months being allowed for the British Government to approve or disapprove. Zululand was made a protectorate of Great Britain and a part

incorporated in the colony of Natal in 1880, and in 1897 the rest of Zululand was annexed to Natal. A part of Bechuanaland was occupied by British troops in 1884 and after the forcible expulsion of Boers from the Transvaal, who had proclaimed the independent republic of Stellaland, with its capital at Vryburg. In 1885 a British protectorate was declared over independent Bechuanaland, the country still ruled by Chief Khama. In the east British control was established over Zululand after the Zulu war of 1879. A portion next to the Natal border was set apart as a reserve for loyal Zulus who had aided the British in the war; the rest was restored to Cetewayo in 1883, but in 1887 about two thirds of this territory, together with the Zulu reserve, was formally declared British territory and placed under the administration of the Governor of Natal, and in 1897 the whole of Zululand and British Amatongaland were incorporated in Natal. A new republic founded by Boer trekkers in Zululand was subsequently incorporated as the district of Vryheid in the South African Republic with the assent of Great Britain. By the convention of 1890 a part of Swaziland also was added to the South African Republic. All the territories north of the Transvaal, including Matabeleland, ruled by King Lobengula, with the neighboring country of Mashonaland and the territory inhabited by the Makalakas and other vassals of Lobengula, comprising all the region north of 22° of south latitude, east of 20° of east longitude, and west of the Portuguese district of Sofala, were declared to be within the British sphere of influence. In 1889 a royal charter was granted to the British South Africa Company, which was authorized to organize an administration for these territories, known collectively as British South Africa or, subsequently, Rhodesia, from the name of Cecil Rhodes, founder of the company. The company was empowered to take also under its administration, subject to the approval of the Imperial Government, the regions north of the Bechuanaland protectorate and the Kalihari region west of it, as far as the German boundary. Portugal originally claimed, by virtue of early conquests and continuous occupation more or less effective, both banks of the Zambesi river, from its mouth up to its source, and the country still farther west, reaching to the Portuguese possessions on the west coast—a continuous zone extending across the whole of Africa from Mozambique to Angola. Yielding, under threat of war, to superior force, the Portuguese Government in 1891 agreed to recognize as a British protectorate these regions known later as British South Africa and British Central Africa, or Zambesi, including Matabeleland, Mashonaland, and the Manica plateau south of the Zambesi, and north of that river the Barotse kingdom, and all other regions as far north as the boundary of the Congo Free State. The Shire highlands and the Nyassa region, where British missionaries already were active, were included, and this district, which had been declared to lie within the British sphere in 1889, were now proclaimed a British protectorate separate from British Central Africa, or Northern Zambesia, over which the British Government extended the administrative authority and commercial privileges of the British South Africa Company. Pondoland was annexed to Cape Colony in 1894, and in 1895 the Crown colony of British Bechuanaland was also handed over to the colonial administration.

Cape Colony.—The colony of the Cape of Good Hope has possessed responsible government since 1872. The legislative power is vested in a Legislative Council of 23 members elected for seven years and a Legislative Assembly of 79 members

elected for five years. The franchise is possessed by all adult males able to register their names, addresses, and occupations, and further qualified by the occupation of house property of the value of £75 or the receipt of a salary of £50 or more per annum.

The Governor is Sir Alfred Milner, appointed in 1898. The Cabinet at the beginning of 1900 was composed of the following members: Prime Minister and Colonial Secretary, W. P. Schreiner; Treasurer, J. X. Merriam; Attorney-General, R. Solomon; Commissioner of Public Works, J. W. Sauer; Secretary for Agriculture, A. J. Herholdt; without portfolio, Dr. Te Water.

Area and Population.—The area of the colony, including Griqualand West, East Griqualand, Tembuland, Transkei, and Walvisch Bay, is 221,311 square miles, with a population at the census of 1891 of 1,527,224. The white population was 376,987; colored, 1,150,237. Pondoland, with an area of 4,040 square miles, had in 1894 a population of 188,000; British Bechuanaland, with an area of 51,424 square miles, had in 1891 a population of 72,736, of whom 5,211 were whites. Cape Town had 51,251 inhabitants; including suburbs, 83,718. The number of marriages in Cape Colony in 1898 was 8,709; of births, 15,340 Europeans and 37,864 colored; of deaths, 6,936 Europeans and 34,031 others; excess of births, 8,404 Europeans and 3,833 others. The number of arrivals from over sea in 1898 was 28,513; departures, 20,638.

Finances.—The revenue of the colony for the year ending June 30, 1898, was £7,212,225 from all sources. Of the total £2,318,190 came from taxation, £3,695,199 from services, £336,953 from the colonial estate, £186,133 from fines, stores issued, etc., and £875,750 from loans. The total expenditure was £8,431,398, of which £1,248,700 went for interest and sinking fund of the public debt, £2,058,587 for railroads, £435,338 for defense, £534,896 for police and jails, £176,210 for the civil establishment, and £1,349,143 under loan acts. The expenditure for the year ending June 30, 1900, was estimated at £8,664,044.

The budget statement of Sir Gordon Sprigg showed a deficit of only £69,000 in the accounts for the year ending June 30, 1900, the late Government having reduced expenditure on having its proposed income tax rejected. For the next year the revenue was estimated at £7,252,000, and expenditure at £7,225,000, not including £2,582,000 of permanent expenditure on harbor works, rolling stock, irrigation, and local loans to be raised by borrowing.

The public debt on Jan. 1, 1899, amounted to £28,383,922, including £3,106,477 of guaranteed loans for harbor boards and other corporate bodies.

Commerce and Production.—The crop of wheat in 1898 was 1,950,831 bushels; of oats, 1,447,353 bushels; of tobacco, 3,934,277 pounds; of mealies, 2,060,742 bushels; the production of wine, 4,861,056 gallons; of brandy, 1,387,392 gallons; of raisins, 2,577,909 pounds. The number of fruit trees in the colony, including peach, apricot, apple, pear, plum, fig, lemon, orange, and naartje, was 4,195,624. The number of cattle was 1,201,522; of horses, 382,610; of mules and donkeys, 85,060; of sheep, 12,616,883; of goats, 5,316,767; of hogs, 239,451; of ostriches, 267,693. The wool product was 8,115,370 pounds; the product of mohair, 8,115,370 pounds; of ostrich feathers, 294,733 pounds; of butter, 2,623,329 pounds; of cheese, 36,729 pounds. The total value of imports in 1898 was £16,682,438, of which £15,261,949 represent merchandise and £1,420,489 specie. The exports of colonial produce were £24,112,483; the total exports £25,318,701 in value. The chief

exports of colonial produce were gold of the value of £15,394,442; diamonds, £4,566,897; wool, £1,766,740; ostrich feathers, £748,565; mohair, £647,548; hides and skins, £548,478; copper ore, £262,830; cereals, £18,602; wine, £15,043. The largest classes of imports were textiles and apparel for £4,367,027 and food and drinks for £3,791,849. Of the total imports £11,443,178 came from Great Britain, £1,048,126 from British possessions, and £4,130,050 from foreign countries. Of the total exports £23,969,425 went to Great Britain, £113,080 to British possessions, and £340,908 to foreign countries.

The beginning of the war in South Africa was followed by a serious interruption to the normal movement of commerce in the British colonies as well as in the Boer republics, of which Cape Colony is the principal outlet. The Boers and their sons had to go on commando, leaving a great part of the abundant crops to perish in the ground. In Cape Colony the call for volunteers and the disorganization caused by invasion or by the fear of invasion led to the same results, although in a less degree. By the end of 1899 there was a heavy fall in the principal exports and general depression was felt in trade. Later the war began to create an immense trade of its own, and exports of most products were stimulated, including mohair, ostrich feathers, copper ore, and sheepskins, the amount of increase over 1898 being £834,000. The export of diamonds, however, was much diminished, showing a loss of £1,579,000, and there was a reduction in the wool export, so that the total value of exports for the year showed a decrease of £1,176,000. The provisioning of the British troops more than supplied the loss on the side of imports caused by the stoppage of the trade in timber and mining machinery from the United States and the other requirements of ordinary times, which is destined to grow in a rapid ratio after the return of normal conditions. Australia and New Zealand furnished a large proportion of the frozen meat and butter required to feed the British forces. Australia sent 3,000 tons of corn beef before January, 1900, and, the supply becoming exhausted, 1,000 tons were ordered in the United States. The supply of cattle on the hoof in South Africa proving insufficient, cargoes were brought from the Argentine Republic, which also sent cavalry horses. Horses were bought in the United States also and in Hungary, the English horses having been found too heavy and not sufficiently hardy. Mules for transport were bought in the United States. The oats of the British Islands were too tender and unfit to stand the climate, and preference was given to Russian oats, and after them to American oats and what could be got from New Zealand. Canada supplied compressed vegetables and 3,000 tons of hay, and thousands of tons of oat hay came from Australia and alfalfa from the Argentine Republic. Canned meats could not be supplied in sufficient quantities by American packers, but 2,000 tons that were shipped from England were American cans rebranded.

Navigation.—The number of vessels entered at all ports during 1898 was 1,045, of 2,812,966 tons, of which 726, of 2,445,572 tons, were British; the number cleared was 1,065, of 2,789,989 tons, of which 720, of 2,401,772 tons, were British. In the coasting trade 1,288, of 3,897,088 tons, were entered and 1,293, of 3,927,311 tons, were cleared. The shipping belonging to the colony on Jan. 1, 1899, comprised 28 steamers, of 4,023 tons, and 7 sailing vessels, of 4,513 tons.

Railroads, Posts, and Telegraphs.—The railroads belonging to the Government had on Jan. 1,

1899, a total length of 1,990 miles, not including 350 miles not yet completed. Of private railroads there were 358 miles. The cost of the Government lines was £20,222,263, an average of £10,162 a mile. The receipts for 1898 were £2,953,090; expenses, £2,012,390. The number of passengers carried was £10,013,432; tons of freight, 1,507,600.

The postal traffic in 1898 was 23,339,379 letters, 9,862,080 newspapers, 750,568 postal cards, 2,303,400 books and samples, and 525,660 parcels.

The length of telegraph lines on Jan. 1, 1899, was 7,224 miles. The number of dispatches in 1898 was 2,321,082; receipts, £143,438; expenses, £132,867.

The Cape Rebels.—The invasion of Cape Colony by Republican commandos was followed in the districts bordering on the Orange river and those north of that river by the adhesion of a large proportion of the inhabitants. Whenever a commando entered a town the Free State flag was hoisted, a meeting was held in the courthouse or the market place, and a proclamation was read annexing the district. The commandant then made a speech, in which he explained to the people that the people must thenceforward obey the Free State laws, though for the present they would be under martial law. A local *landrost* was appointed, and those who refused to accept Republican rule were given a few days in which to leave the district. Their property was often commandeered, and those who stayed were commandeered themselves besides giving up whatever of their possessions were required for military purposes, and were compelled to join the Boer commandos. Some thousands of Cape Colonists became burghers of the South African Republic, and joined the Transvaal army immediately before or just after the outbreak of hostilities. When the Free State commandos encamped on their own side of the Orange river preparatory to their invasion of Cape Colony other thousands from the northern and western districts joined them. And when they crossed the river and proclaimed the annexation of the northern part of the colony they were augmented by at least their own numbers of colonial Boers and sympathizers. In Vryburg, Barkly West, and other districts north of the Orange river as many colonists volunteered in the Transvaal and Orange Free State commandos as in the older parts of Cape Colony. Sir Alfred Milner calculated that in January, 1900, more than 10,000 Cape Colonists were fighting against the British, and the rebellion had not yet reached its height. It broke out spontaneously in places where no Boer commandos had appeared, and was spreading secretly when a vigilant military police, aided by loyal colonists, put a stop to the movement in the districts still in British occupation. When the invasion of the Free State by Lord Roberts drew away most of the burghers for the defense of their own soil, and when the British occupation of Bloemfontein convinced the majority of the rebellious colonists of the hopelessness of the Boer cause and the gradual reconquest of the annexed districts by the British forces rendered them powerless to serve the cause further in Cape Colony, the bulk of them returned quietly to their homes or made their submission, and only a comparatively few ardent ones marched northward with the retreating Boer columns. The question of the treatment to be extended to those who had borne arms against the Queen or given active aid to the enemy seemed one of vital importance to the Cape ministers, and it was one that could not be solved without the concurrence of the imperial authorities. They submitted a minute, which Sir Alfred Milner forwarded on April 28,

proposing the appointment of a judicial commission, comprising two judges of the Supreme Court and a barrister acceptable to the Secretary of State, for the trial of persons implicated in the rebellion, the commission to be vested with the powers of both judge and jury and to decide on a verdict by a majority vote. A few days later they sent an appeal for clemency for all except the principal offenders, whose trials would mark the magnitude of their offense, and whose punishment would serve as a deterrent, pointing out that the insurrection was a consequence of invasion and generally subsided as soon as the invading force was withdrawn, and that it was accompanied with few, if any, cases of outrage or murder and no great destruction of private property. The interests of sound policy and public morality demanded, instead of a general proscription of the misguided men who joined the ranks of the rebels, that the Imperial Government should issue as an act of grace a proclamation of amnesty for all persons chargeable for high treason except the leaders selected for trial. The agitation and unrest prevailing in the colony was due to uncertainty regarding their fate, and the future well-being of the colony depended on a policy of well-considered clemency, which would have the best possible effect on the loyal majority of the Dutch population, which had shown commendable self-restraint, and would help to unite the white races, between which harmony was a necessity in view of the large and increasing barbarian population. The rebellion was of a milder type than the one in Lower Canada, where moderation was adopted with the happiest results in 1838. Mr. Chamberlain, in his reply, argued that amnesty would place rebels in a better position than those who have risked life and property in the determination to remain loyal, and while sympathizing with a policy of clemency to rebels he held justice to loyalists to be an obligation of duty and honor, and that it was necessary in the interests of future peace to show that rebellion can not be indulged in with impunity or prove profitable to the rebel even if unsuccessful. Even those who were tools of others who had deceived them should learn individually that rebellion is a punishable offense. He distinguished between different categories of rebels: ringleaders and promoters; those who have committed outrages or looted property; those who have committed acts contrary to the usages of civilized warfare, such as abuse of the white flag, firing on hospitals, etc.; those who have openly and willingly waged war against the imperial forces; those who have confined themselves to aiding the enemy by giving information or furnishing provisions; and those who can prove that they have acted under compulsion. Recognizing the difficulty of indicting for high treason all who had taken part in the rebellion, he suggested the expediency of investigating either the proposed judicial commission or a separate commission with powers to schedule the names of persons implicated in the rebellion under these various heads: the first three categories to be tried for high treason before the judicial commission, the fourth and fifth to be fined and disfranchised on pleading guilty, and the last to be merely disfranchised. The Secretary of State would not consider the Canadian rebellion a precedent because it was a rising in time of peace for the remedy of grievances and was not a formidable affair, whereas the Cape Colonists had gone over to the Queen's enemies and entailed danger and heavy losses on the troops. As to the duration of disfranchisement, he proposed that it should be for life. Mr. Chamberlain did not wait for the full text of the proposals of

the Cape ministers, but on receiving the telegraph summary made known at once the uncompromising policy of the Imperial Government. Not one of the ministers was willing to submit to the Cape Parliament a measure of the character demanded by the Secretary of State. Premier Schreiner and Attorney-General Solomon were willing to disfranchise the rebels for five years and compensate the loyalists for their losses, but they could not get any of their colleagues nor more than half a score of their followers even to agree to that measure of punishment for any except ringleaders. The Afrikaner Bond was willing to accept a bill indemnifying the Government and the military authorities for acts committed under martial law and to grant compensation for property commandeered by the Boers, but only on condition of a full amnesty to the rebels who furnished a guarantee of good behavior. Ministers Merriman, Sauer, and Te Water vehemently opposed the Premier's proposed compromise, and saw no ground for punishing men for taking up arms in what they considered a righteous war. The deadlock in the Cabinet could not be broken. Mr. Schreiner, who before the war incurred the animosity of the English party through his efforts to bring about an understanding and preserve the peace of South Africa, had during the progress of the war given deep offense to the more earnest Afrikaners by countersigning the proclamations of the High Commissioner, in taking off the meat duties for the particular benefit of the refugee Uitlanders and to the detriment of the colonial producers, and for recruiting bodies of troops in the colony to fight on the British side, and especially for raising native levies in the native reserves. Mr. Solomon offended the majority of the supporters of the ministry when, instead of interfering to secure the constitutional rights of citizens who fell into the hands of the military, he gave full consent to the operations of martial law. Some of the acts of the military tribunals seemed monstrous to the Afrikaners, and the prospect of obtaining a bill of indemnity ratifying the acts done and sentences passed during the period of martial law was not promising. The courts-martial had sentenced men to do convict labor for five or ten years in districts where they had been held in honor and had sanctioned the looting of homesteads and farms on the ground that it was the property of rebels. Boer farmers were arrested wholesale, herded together for weeks in noisome cells, and finally released for want of evidence. The evidence of Kaffirs was taken against their masters. The secretary and other members of the South African League and some of the Johannesburg reformers went into the rebel districts as they were reoccupied and took the lead in the investigations, a volunteer committee for what the Dutch called smelling out rebels. No sentence or act of military courts or military officers, if justified only by martial law, is legal according to English law, and officers who carry out the decrees of military tribunals are liable to prosecution for wrongful assault or illegal detention unless the proceedings are ratified by a special act of the Legislature. The Dutch colonists regarded many of the sentences and acts of confiscation to which their kinsfolk were subjected as barbarous, and wished to preserve for them the right of appeal. The charges of treason brought against many members of the Cape Parliament reduced the Bond majority in the Assembly to only 4 votes. Mr. Schreiner attempted to form a coalition ministry, having the assistance of Mr. Rose-Inness, who urged the Progressives to support Mr. Schreiner in a policy of moderation and conciliation, giving the special

tribunal full discretion in punishing the ringleaders, but subjecting the others to only temporary disfranchisement. The South African League, which controlled the Progressive party, would not consent to a coalition with the moderate members of the Bond, and the Progressive leaders, expecting a speedy termination of the war, were willing to accept the responsibilities of office, since the support or even the abstention of Mr. Schreiner's handful of followers would give them a majority to start with. On June 13 Mr. Schreiner, seeing the attitude of the Progressives and the impossibility of his forming a coalition Cabinet and hoping that Mr. Rose-Inness could form one, instead of accepting the resignation of the dissentient ministers and endeavoring to reconstruct his Cabinet by the inclusion of moderate Progressives, placed the collective resignation of the ministry in the Governor's hands. Mr. Schreiner, although the parliamentary leader of the Bond party, never identified himself with the principles of the Bond. As the war progressed he co-operated more heartily with Sir Alfred Milner, his chief anxiety having been throughout to save the colony from civil war. A conciliation movement that was started by the Bond after the capture of Cronje at Paardeberg left little doubt of the ultimate defeat of the republics, which had for its objects the preservation of the independence of the republics and immunity for all who had taken part in the rebellion, received no countenance from Mr. Schreiner nor from Mr. Solomon, who proposed to appoint a judicial commission to visit the rebel districts and put the rebels on trial. At a conciliation congress at Graaff Reinet the Bond leaders demanded the unqualified independence of the republics, a permanent arbitration treaty, and the withdrawal of British troops from South Africa. This led to Mr. Schreiner's convoking a conference of the party, at which his policy was condemned by three fourths of the delegates. The resignation of the ministry followed necessarily this action of the caucus.

Sir Alfred Milner accepted Mr. Schreiner's resignation and called on Sir Gordon Sprigg to form a ministry. The Progressive leader first proposed to Mr. Solomon that he should continue in the office of Attorney-General, but it was finally decided that he should form a purely Progressive ministry. In this he succeeded, and on June 18 the new Cabinet was announced as follows: Premier and Treasurer, Sir J. Gordon Sprigg; Colonial Secretary, T. L. Graham; Attorney-General, J. Rose-Inness; Commissioner of Public Works, Dr. Smarrt; Secretary for Agriculture, Sir Pieter H. Faure; without portfolio, J. Frost. The chief task of the new ministry, that of framing the laws dealing with the rebels, was thus given to Mr. Rose-Inness, who enjoyed the confidence of the moderate Afrikaners. Even after deducting the members of the Bond party who were in prison on charges of treason or had escaped from South Africa the Progressives were in a minority of 5. Parliament was opened on July 20. The Attorney-General brought in a comprehensive bill for the indemnification of acts done in good faith under martial law, and confirming the sentences of the military tribunals for the punishment of rebels, and for the compensation of loyalists who had sustained direct losses during the war through military operations or the acts of the enemy or of rebels. The new Cabinet had adopted Mr. Solomon's measures just as he had drafted them. The special tribunal with the powers of a judge and the functions of a jury was to try only ringleaders. The sentence of disfranchisement was to be pronounced by commissions with quasi-judicial

powers, and not against any who could prove that they had gone into the rebel ranks under compulsion. The procedure of the commissions was to cite all who had delivered up their arms or who were denounced as rebels and pronounce them disqualified from voting or holding office for five years unless they appeared in court and proved their innocence. The Attorney-General was empowered to indict before the special court after preliminary investigation by the military authorities, without requiring that preparatory examinations should be taken in the usual manner; but if satisfied that the investigation was insufficient he could direct a supplementary investigation. The court could impose any penalty that a judge of the Supreme Court was entitled to impose for high treason. Its object was the trial and punishment only of those rebels who had been ringleaders in instigating rebellion or who were sufficiently influential in their districts to have seriously encouraged rebellion by their example. Martial law had already been suspended in three districts when Mr. Merriman offered a resolution for its general repeal on the ground that its continuance after the termination of armed resistance and the reopening of the civil courts was contrary to the inherent rights of British subjects. He described the rule of martial law in Cape Colony as a reign of terror, and said that the districts which had been occupied by the enemy were now overrun by informers who from political motives were anxious to proscribe the entire Dutch population. When the resolution was toned down by an amendment into a form which Mr. Schreiner and his followers felt constrained to approve, calling for the repeal of martial law in districts where armed resistance had ceased or where it was not indispensable for the success of the imperial forces, Sir Gordon Sprigg, while declaring that the Government could not accept the amendment any more than the original resolution, said that it would not consider a defeat on the amendment as in any way implying that it had not got the confidence of the house. Its adoption, therefore, did not upset the ministry, which carried through the treason bill after a long debate. Dr. Jameson sat in the Assembly as a member for Kimberley, and Gen. Brabant, whose cavalry had done more than the British troops to turn back the tide of rebellion, was there to defend the actions of his partisan troopers. Cape Colony raised altogether 24,000 volunteers to fight on the British side, more than all the other colonies combined. The act to punish rebels, compensate loyalists, and ratify martial law was the only legislative measure of the session. Mr. Schreiner explained that his ministry had not demanded amnesty, as that was the prerogative of the Crown, and that the Imperial Government had modified its first proposals at the suggestion of the ministers. He offered an amendment, which was carried, enabling the Governor to proclaim an amnesty at any time within five years if it were sanctioned by the Crown and by the Cape Parliament. The rebels themselves were generally willing to accept disfranchisement when it saved them from going to prison, but the Bond politicians asserted that it would make of South Africa a second Ireland instead of a Canada; that the disfranchisement of 10,000 citizens would perpetuate racial feeling and the animosities of the war.

Basutoland.—The Basutos, whose country lies between Cape Colony, the eastern part of the Orange Free State, and Natal, are governed by a Resident Commissioner, Sir G. Y. Lagden, under the direction of the High Commissioner for South Africa. The area is 10,293 square miles, with an

estimated population of 250,000. The natives raise sheep, horses, and cattle and grow mealies, wheat, and Kaffir corn. The imports in 1898 were £100,280 in value, and exports £138,500. The revenue, raised by a hut tax of 10s., the sale of licenses, and a contribution from the Cape Government of £18,000, amounted in 1899 to £46,847; expenditure, £46,417.

Bechuanaland Protectorate.—The Bamangwato under Chief Khama, the Bakhatla under Lenchwe, the Bangwaketse under Bathoen, the Bakwena under Sebele, and the Bamaliti under Ikaneng have been governed since 1895 by a Resident Commissioner, Major H. J. Goold Adams. The area of the protectorate is 213,000 square miles, with a population estimated at 200,000.

Natal.—The colony of Natal has had a modified form of responsible government since 1893. The Legislative Assembly contains 39 members, including 1 from Zululand, elected under a property qualification for four years. The Legislative Council contains 12 members, including 1 from Zululand, appointed by the Governor for ten years. The Governor at the beginning of 1900 was Sir Walter Francis Hely-Hutchinson. The ministry, constituted on June 9, 1899, contained the following members: Premier and Minister of Lands and Works, Lieut.-Col. A. H. Hime; Attorney-General and Minister of Education, H. Bale; Secretary for Native Affairs, F. R. Moor; Colonial Secretary, C. J. Smythe; Treasurer, W. Arbuckle; Minister of Agriculture, H. D. Winter. Money bills must be first introduced in the Assembly, and may be rejected but not amended by the Council; but, unless recommended by the Governor, no money bill can become law during the session in which it is passed. The assent of the Governor is required to all legislation, and under certain conditions this may be revoked within two years.

Area and Population.—The area of the colony, including that part of Zululand that has been annexed, is estimated to be 35,019 square miles. In a total population of 902,365 there are only 60,000 whites, in part the descendants of the early Boer settlers, but mainly of British origin or extraction. Labor is performed by natives and by imported Indian coolies.

Finances.—The revenue for the year ending June 30, 1898, was £1,964,315; expenditure, £1,812,318. The chief items of revenue were £1,000,323 from railroads, £383,813 from customs, £21,893 from excise duties, £39,094 from sales of land, £25,625 from telegraphs, £32,428 from stamps and licenses, and £129,596 from the native hut tax. The chief items of expenditure were £538,356 for railroads, £92,947 for public works, and £61,054 for defense, besides £607,464 from loans. The public debt on June 30, 1898, amounted to £8,019,143.

Commerce and Production.—The chief cultivated commercial crop is sugar, of which 581,533 hundredweight were produced in 1898. Tea is also grown for export, the crop in 1898 amounting to 1,037,500 pounds. Europeans had 157,370 acres under cultivation in 1898, natives 360,232 acres, and Indians 24,725 acres. Europeans owned 155,456 cattle, 98,510 goats, 543,619 sheep, and 32,771 horses; natives possessed 122,077 cattle, 351,528 goats, 56,403 sheep, and 24,611 horses. The coal raised in 1898 amounted to 387,811 tons.

The total value of imports in 1898 was £5,323,216, about 70 per cent. coming from Great Britain. The value of exports was £1,246,000, of which 68 per cent. went to Great Britain. Of imports, clothing amounted to £368,072; haberdashery, £492,818; flour and grain, £368,101; iron manufactures, £539,046; leather manufac-

tures, £246,054; cotton goods, £116,677; woollens, £85,073; machinery, £306,035; wines and liquors, £166,741. Of the exports the chief articles in value were wool for £565,479, hides and skins for £184,850, coal for £125,666, gold for £40,635, mohair for £36,545, and bark for £30,929.

Navigation.—The number of vessels entered during 1898 was 690, of 1,264,591 tons; cleared, 687 vessels, of 1,264,591 tons.

The shipping registered in the colony consisted in 1898 of 14 steamers, of 2,495 tons, and 14 sailing vessels, of 699 tons.

Railroads.—The railroads within the colony have a total length of 505 miles, all belonging to the Government. One joins at Harrismith a railroad running through the Orange Free State, and one runs from Durban through Pietermaritzburg to the Transvaal border, whence it extends through Johannesburg to Pretoria, the total distance being 511 miles. The cost of the Natal railroads was £6,950,621. The receipts for 1898 were £986,417; expenses, £589,815.

Effects of the War.—The colonists of Natal, being mainly of English extraction, were most eager for the war with the Boers, anticipating a brilliant political and commercial future for their colony in the event of victory by British arms, because Natal is the natural outlet for both the Transvaal and the Orange Free State. The Boers on their part made the conquest of this land, which was once theirs, and would give them access to the sea, their first object, as in all their history they have sought a seaport of their own and railroad communications under their sole control as the best guarantee for the political and economic independence which they wanted. Thus political rather than strategic considerations made Natal the theater of the Transvaal war in its early stages, and political hopes as well as patriotic and racial feeling moved the colonists of British descent to take an active part in the contest, while those of Boer descent, the sons and grandsons of the Dutch emigrants who first won the country from the Zulus after a heroic campaign and then had it wrested from them by a British armed expedition, gave aid and comfort to the Boer invaders. Refugees from Johannesburg flocked into Maritzburg and Durban, and had to be fed by charity except those who, with many young men of Natal, were accepted as volunteers in the South African corps, which the British commanders were in the beginning reluctant to employ, but came to depend upon more and more. Before the tide of war turned Boer commandos marched through Natal at will, threatening even Maritzburg; and when British re-enforcements were poured in for the relief of Ladysmith, the corner of Natal of which the besieged town was the center became the seat of military operations, and from there down to the sea were stretched the British camps. Bodies of Boers rode through the parts of the colony that were ungarrisoned and through Zululand. They commandeered what they wanted more harshly as the war became more bitter and their necessities and perils grew greater. Still Natal was not so great a sufferer from the vindictive reprisals and barbarities of the war as other parts of South Africa, where later phases of the struggle were enacted. When the armies faced each other on the Tugela not only were the ferocious passions of warfare not yet aroused, but the commanders on both sides were anxious to spare the Natalians as much as possible, the British because they were generally loyal colonists who suffered for their loyalty, the Boers because they hoped to gain the country for their own, and British and Boers alike because they were vying

with each other in affording to the world an example of humane warfare. Nevertheless Natal, being for the longest period the field of operations and the camping ground for the main armies, suffered as great loss and disturbance as the scenes of the later and more desperate conflicts. Loyal colonists were compelled to leave their homes and abandon their property. Many of the volunteers and police lost their lives in repelling Boer raids. When the British generals began to select colonial troops for the most difficult and dangerous duties the casualties among them increased more rapidly than the recognition that they won by their bravery and intelligence. The Government suspended all public works, and yet the revenue was far from sufficient to defray the expenditure, which necessarily increased in consequence of the war. The ministers were compelled to apply to the Imperial Government for temporary financial support, which was promptly rendered. An inquiry into the financial condition of the colony is in prospect, and after the conclusion of the war Natal, which, owing to its peculiar labor conditions and the great preponderance of the native population and paucity of whites, has never received the attention that is given to larger British communities, expects an extension of boundaries or an improvement in its political and financial position to result from the determined and unswerving support the colony has afforded the Imperial Government during the war and the sacrifices suffered by the colonists. The parliamentary session was opened on May 3. A bill for more effectually dealing with persons accused of treason was directed against the Boer colonists, who are only numerous in the higher northwestern part of the colony. Another bill was passed in order to indemnify the Governor, the ministers, and the military in respect of acts not protected by the existing laws, but which were rendered necessary through the enforcement of martial law and the invasion of the colony. The Zulus were kept quiet during the war by the admonitions they received from both the British and the Republican authorities. The Swazis, who are by race and customs a branch of the Zulu nation, were handed over to the administration of the South African Republic in 1894, having previously been recognized as independent in 1884 and in 1890 as under a joint British and Boer tutelage, a committee of Boers and British traders looking after the interests of the whites, who numbered from 900 to 1,200, while of the natives there are from 40,000 to 50,000, occupying a country about 8,500 miles in extent. Under Boer sovereignty the Swazis still were governed by their native rulers according to their own customs. When the Anglo-Boer war broke out the burghers, who use their farms in Swaziland for winter pasturage and generally have their homes elsewhere, left the country to go to the war. In October, 1899, Gen. Schalk Burger went to the king's kraal and told him that the Transvaal Government handed back the country to the natives to administer as the king thought fit. A few days later the British consul brought a message from the High Commissioner admonishing the natives not to interfere in the war nor to kill off one another, as they sometimes do in intestine feuds when the restraint of white rule is not upon them. There was a standing feud between the king and the old queen, she having always been a partisan of British predominance and having lost power and prestige by the relinquishment of the country to the Transvaal, while the king was a friend of the Boers. The queen had her devoted followers in the nation, but they were not strong enough to dispute the

authority of the king, at any rate as long as the whites remained in the country. A month after the visit of Schalk Burger the king died from some cause and the queen suddenly acceded to power. She nominated her son Isitoso to be king in succession to Ngwane, and immediately began to kill off her old adversaries and all possible rivals to her son in order to secure his position against the coming of the British. Ngwane succeeded his father in 1889, and under white tutelage considerable advancement toward civilization was made during his reign. After his death the queen established herself in the royal kraal about 9 miles from Bremersdorp, the capital, assumed absolute power, and after her enemies were disposed of revived all the savage customs that existed many years before.

Rhodesia.—The order in Council published on Nov. 25, 1898, transferred the government of Southern Rhodesia, formerly intrusted to the British South Africa Company, to a Resident Commissioner, appointed by the British Colonial Secretary, assisted by an Executive Council, consisting of the Resident Commissioner, the Administrators of the two provinces, and not fewer than 4 members appointed by the British South Africa Company with the approval of the Secretary of State. There is a Legislative Council, of which the Senior Administrator is president, composed of the Administrator of Matabeleland, the Resident Commissioner, 5 members appointed by the British South Africa Company and confirmed by the Secretary of State, and 4 members elected by the registered voters. The legislative period is three years. Ordinances of the Legislative Council obtain the force of law when approved by the High Commissioner, but may be annulled within a year by the Secretary of State. There is a Secretary for Native Affairs appointed by the High Commissioner, and under the direction of this secretary are native commissioners. The military police are under the direct control of the High Commissioner for South Africa.

The area of Southern Rhodesia is 174,728 square miles. It is divided into the province of Matabeleland, which has an extent of 60,728 square miles, with a population of about 155,000, and the province of Mashonaland, which has an estimated area of 114,000 square miles and an estimated population of 270,000. A railroad from Vryburg to Bulawayo is being extended to Gwelo and across the Zambesi to the southern end of Lake Tanganyika, whence it will run northward through German East Africa into Uganda, and eventually connect with the Egyptian line from Cairo to the Soudan. The Rhodesian Railroad is operated by the Cape Government. The net earnings for the year 1898 were £99,290, not including a subsidy of £20,000 from the Imperial Government and £10,000 from the British South Africa Company. Another railroad enters Mashonaland from the Portuguese port of Beira and has been completed to Salisbury, with an extension to Bulawayo in progress. The Rhodesian post office in 1899 dispatched 706,751 letters and postal cards to places in South Africa and 253,662 to foreign destinations, besides 247,311 newspapers and parcels and 38,857 registered articles. The postal receipts were £18,197; expenses, £20,364. The telegraph system of Rhodesia embraces 2,536 miles of line. The number of private telegrams received in 1899 was 79,955, including 5,652 from over sea; dispatched, 79,798, including 6,156 cable messages. The revenue from telegraphs was £23,278; expenses, £40,000.

The British South Africa Company, which has issued £4,375,000 of capital stock and £1,250,000 of debentures, derives revenue from mining, trad-

ing, and professional licenses, leases of stands, and postal and telegraph services. The estimated receipts for the year ending March 31, 1900, were £381,000; expenditures, including supplementary estimates, £793,066.

The charter of the British South Africa Company included in the territory given over for its administration the British sphere north of the Zambesi, with the exception of the British Central Africa Protectorate in the vicinity of Lake Nyasa. These regions, known as Northern Zambesi, comprise all of Central Africa south of the Congo Free State and German East Africa excepting the possessions of Portugal on the Atlantic and Pacific coasts. The area is estimated at 251,000 square miles and the population at 650,000. Only about 350 Europeans are found in the whole territory.

The Administrator of Mashonaland, who is the Senior Administrator of Southern Rhodesia, is W. H. Milton. Capt. A. Lawley is Administrator of Matabeleland. Robert E. Codrington, residing at Fort Jameson on the Tanganyika plateau, is Deputy Administrator for Northeastern Rhodesia, and Major R. T. Coryndon, staying at Lialui, the kraal of the King of the Barotse, represents the British South Africa Company in the western division of Northern Rhodesia.

British Central Africa Protectorate.—The protectorate on the southern and western shores of Lake Nyasa grew out of a missionary settlement established as a refuge for the natives pursued formerly by Arab slave raiders. The area is 42,217 square miles and the population is about 900,000, with 377 Europeans and 250 Indians. In the Shire highlands Europeans have plantations where coffee of superior quality is grown—700 tons in 1899—besides rice, wheat, oats, barley, and other products. Horses thrive there also. The administration is in charge of a Royal Commissioner, who is responsible to the Foreign Office in London. The present Commissioner is Alfred Sharpe. The value of imports in 1899 was £99,290; exports, £35,623. The principal articles of export are ivory, coffee, and rubber. The revenue for 1899 was £24,538; expenditure, £65,715. A Sikh force of 215 men and a native force of 1,070 men trained by Sikh drill sergeants preserve order in the protectorate and in the northeastern part of the British South Africa Company's territory. A battalion of 1,048 natives under British officers was raised and trained for service abroad and sent to do garrison duty in Mauritius, but came into collision there with the inhabitants and had to be withdrawn. They were kept on shipboard till many of their number died, and were then sent to do garrison duty in British Somaliland. There is a force of 200 civil police in the protectorate, also an artillery force of 2 mountain guns and 2 Maxims. On the upper Shire river and in Lake Nyasa 3 gunboats are kept, while British gunboats patrol the lower Shire and the Zambesi. The boundary between the protectorate and German East Africa, from the mouth of the Songwe on Lake Nyasa to the mouth of the Kilambo on Lake Tanganyika, has been delimited by a joint commission. The white settlers in the protectorate have requested the Imperial Government to make regulations prohibiting the emigration of laborers attracted by the high wages offered for native labor in Beira and in the gold mines of Southern Rhodesia, taking them away from the coffee plantations for long terms of work south of the Zambesi, where they are tempted to spend their wages in drinking and other vices and are no better off in the end than if they remained in their villages earning the accustomed low wages of agricultural laborers and carriers in Central Africa.

Portuguese East Africa.—The Portuguese possessions on the east coast of Africa have an area of about 301,000 square miles, with an estimated population of 3,120,000. Mozambique, Zambesia, and Lourenço Marques are the chief provinces. The Manica and Sofala regions in the south are administered under a royal charter by the Mozambique Company and the district between the Rovuma, Lake Nyasa, and the Lurio by the Nyasa Company. Inhambane is now under the colonial administration, and Gazaland, where disturbances have occurred, is governed as a military district. The revenue for 1898 was estimated at 4,232,328 milreis, and expenditure at 3,945,765 milreis. The imports at the port of Mozambique for 1898 were valued at £174,456, and exports in 1897 at £160,571; imports at Quilimane in 1898 at £87,557, and exports at £71,533; imports at Beira at £911,163, exports at £31,106, and transit trade at £176,606; imports at Chinde at 379,275 milreis, and exports at 550,358 milreis; imports at Lourenço Marques at £751,931, and exports at £16,800. The Delagoa Bay Railroad extends from Lourenço Marques 57 miles to the Transvaal border, and thence 290 miles to Pretoria. The Beira Railroad has a length of 203 miles in Portuguese territory and is continued from the frontier of British South Africa to Salisbury. There are 950 miles of telegraphs. The colonial military force consists of 1,642 Europeans and 3,246 natives. The Beira Railroad was the outcome of an agreement made between Great Britain and Portugal on June 11, 1891, mainly for the purpose of fixing the respective frontiers in consequence of the occupation of Mashonaland and Matabeleland by the British South Africa Company. The frontier question was not settled till later, but in the agreement of 1891 the Portuguese Government undertook to construct a railroad from the frontier to the sea at Beira, and agreed not to impose any transit duties higher than 3 per cent. The concession for the railroad, originally granted to the Mozambique Company, was transferred to an English syndicate, which completed the line up to the frontier at Umtali in July, 1898. From there to Salisbury, a distance of 170 miles, the line was constructed with guarantee of interest from the British South Africa Company. The journey from Beira to Umtali takes two days, as the service is very slow. When the British military authorities wished to send a body of troops under Sir Frederick Carrington into Rhodesia to march to the relief of Mafeking after the failure of the force that attempted to advance from the south after the siege of Kimberley was raised, a request was presented to the Portuguese Government to allow the troops to be transported over the Beira Railroad. The Boer governments protested against the proposed violation of neutrality, intimating that they would regard permission for the passage of British troops through Portuguese territory as tantamount to a hostile action. No other Government supported their objection, and the Portuguese Government, while denying any hostile intention against the Boers, insisted that by treaty with England Portugal was bound to permit the passage of British troops. This right of way was stipulated as one of the conditions under which Great Britain recognized Portuguese rule in the Beira territory in the extension given to it in the Anglo-Portuguese agreement. A secret Anglo-German agreement to respect the integrity of Portuguese possessions in Africa was made at a time when Portugal was in financial difficulties and when the two governments were disposed to guarantee the success of a loan which might be secured on the colonial customs receipts.

Delagoa Bay Award.—After the confiscation of the unfinished Delagoa Bay Railroad by the Portuguese Government the American and British governments, on behalf of contractors and bondholders, made a protest, and as the result of negotiations it was agreed to refer the controversy to the arbitration of the Swiss Federal Council. The Swiss Government appointed an arbitration tribunal in June, 1891. This tribunal did not deliver its judgment till March 29, 1900. The original charter for the railroad from Lourenço Marques to the Transvaal frontier was granted in December, 1883, to Col. Edward McMurdo, an American citizen, who in May, 1884, organized a Portuguese company. The Transvaal Government signed a convention with the Portuguese Government by which it agreed, as soon as the railroad should reach the frontier, to continue it to Pretoria. By the terms of the McMurdo concession the company had the right to fix the rates to be charged on the railroad and to operate the same for ninety-nine years, unless the Portuguese Government exercised its reserved right of purchasing the line after thirty-five years. The Portuguese Government bound itself not to construct or permit a competing line within 100 kilometres on either side. The absolute right to fix tariffs granted to the American concessionaire was objectionable to the Transvaal Government, which obtained from the Portuguese Government a secret provisional concession for a tramway to be built in case the Delagoa Bay Company failed to complete the line to the frontier within a reasonable time, and to be used for the conveyance of passengers and freight if the company would not come to an agreement with the Transvaal authorities establishing reasonable rates for the through traffic. Col. McMurdo finally formed a company in England in March, 1887, to build the line under the Portuguese charter, the Lisbon authorities having meanwhile denied that they had any secret agreement with the Transvaal. The construction by an English syndicate of the Delagoa Bay section of what was intended to be the national Transvaal Railroad, giving an outlet on the seaboard independent of the railroads of Cape Colony and Natal, was not regarded with favor in Pretoria when this syndicate retained the unrestricted power to fix and regulate tariffs. It was to the secret influence of the Transvaal Government, moved by these political considerations, that the subsequent action of the Portuguese Government was attributed. The frontier was assumed to be about 80 kilometres from the coast, but it had never been fixed. The Government finally settled on a line and demanded of the company that the railroad should be completed up to it within a certain time. The company protested that the period was too short. Nevertheless as soon as it expired the Portuguese Government confiscated and took possession of the railroad, which it completed and has since operated in conjunction with the Dutch company that built and operated the main part of the line in Transvaal territory. The English company applied to the British Government for its assistance and the widow of Col. McMurdo, the original concessionaire, he having died in the meantime, applied to the American Government. In accordance with the agreement concluded in 1891 the three arbitrators were to determine the amount of compensation to be paid to the claimants by the Portuguese Government for the seizure of the railroad and the cancellation of the concession, which included a considerable grant of lands. The long delay was charged by the claimants to the arbitrators, while the latter said that the parties to the suit filed such a mass

of documents and raised so many difficult and complex questions requiring expert opinion and local investigation that they could not complete their task earlier. The decision was a voluminous document. The tribunal condemned as arbitrary and illegal the action of the Portuguese Government in seizing the railroad and rescinding the charter. The amount of damages awarded to the claimants was only about a third as much as they contended for, but on the other hand it was three times as much as the Portuguese Government had offered in settlement. In addition to £28,000 sterling paid in by Portugal on account at the beginning of the proceedings, the arbitrators unanimously directed Portugal to pay over to the British and American governments the sum of 15,314,000 francs, with simple interest at 5 per cent. from June 25, 1889, the date of the seizure of the railroad by the Portuguese authorities. The costs were directed to be borne in equal shares by each of the three parties to the suit, and the award to be divided between Mrs. McMurdo and the British bondholders in accordance with a scale of distribution to be drawn up by the claimants themselves. In fixing the amount of the award the arbitrators took into account the capital actually invested in the railroad by the company and the capital invested since 1889 by the Portuguese Government and computed the profits for thirty-five years and the price that Portugal would have to pay for the railroad at the end of that term, which was taken to be twenty times the estimated average profits for the last seven years. The total capitalized value was credited to the company and to the Portuguese Government in the proportion of their respective contributions of capital. The arbitrators refused to take into consideration the market value of the bonds and shares at the time of the confiscation or to grant exemplary damages against the Government for its breach of contract, for which the unstable financial condition of the company afforded some excuse.

Angola.—The Portuguese territory on the southwest coast of Africa is divided into the districts of Congo, Loanda, Benguela, Mossamedes, and Lunda. The area is 484,800 square miles, with a population estimated at 4,119,000. The revenue for 1900 was estimated at 1,673,111 milreis, and expenditure at 2,013,671 milreis. The imports in 1897 were valued at 6,380,368 milreis; the exports, chiefly coffee and rubber, at 6,577,791 milreis. Wax, oils, cocoanuts, and ivory are minor exports. Sugar is grown for the distillation of rum, and cattle do well on the higher elevations. Gold, petroleum, iron, copper, and salt are found in considerable quantities. Fish are caught and preserved. The Mossamedes Company, formed with German capital, has a concession for cattle growing, fishing, and mining throughout a large region, including the gold field discovered in Cassinga.

German Southwest Africa.—The German possessions in Southwest Africa have a total area of 322,450 square miles, with a native population estimated at 200,000 and 1,840 Europeans, of whom 1,557 are Germans. The European military force numbers 761 men. A concession for the colonization of the lands in the north that are adapted for grazing has been granted to a German company, and the Government offers to advance 4,000 marks free of interest to any *bona fide* German settler. From the new harbor at Swakopmund a railroad is being constructed to Windhoek. Over 80 miles were completed before the end of 1899, and an imperial subsidy of 2,300,000 marks was granted for 1900. The expenditure for 1899 was estimated at 7,479,000 marks, of which the Im-

perial Government contributed 6,909,000 marks. For 1901 the German Reichstag voted 7,181,300 marks. The imports in 1899 were valued at 5,868,281 marks, of which 4,883,753 marks came from Germany; exports, 915,784 marks, of which 773,000 marks represent guano and the remainder mostly ostrich feathers.

The railroad agreement concluded on Oct. 28, 1899, between the German Government and the British South Africa Company, as the result of Cecil Rhodes's negotiations in Berlin, provided for a connection of the projected railroad from the Cape to Cairo, with a line to the west coast of Africa passing through German territory. If the German Government be not ready itself to construct the railroad from the British frontier to the coast when the British South Africa Company shall communicate its intention of connecting its system with the west coast, then the British South Africa Company will be entitled to build the section across German territory. An Anglo-German company was organized in 1900 to construct a railroad 400 miles long from Great Fish Bay, in the Portuguese territory of Angola, to Otavi, in German Southwest Africa, where the company intends to carry on mining operations. An expedition was sent out to prospect the copper mines in that neighborhood. Half the capital of £2,000,000 to be embarked in the railroad and mining enterprise was subscribed by German and half by English capitalists. The Southwest African Company obtained the Damaraland concession, granted in 1892, which covers the Otavi district, where surveys were made in 1893 and 1894 with promising results. The German Hanseatic Land and Mining Company sent an expedition to prospect in the district of Rehoboth, 250 miles inland from Walvisch Bay. Copper mines have been discovered within 75 miles of Walvisch Bay, for the working of which private individuals have taken out licenses.

ALABAMA, a Southern State, admitted to the Union Dec. 14, 1819; area, 52,250 square miles. The population, according to each decennial census since admission, was 127,901 in 1820; 309,527 in 1830; 590,756 in 1840; 771,623 in 1850; 964,201 in 1860; 996,992 in 1870; 1,262,505 in 1880; 1,513,017 in 1890; and 1,828,697 in 1900. Capital, Montgomery.

Government.—The following were the State officers in 1900: Governor, Joseph F. Johnston; Secretary of State, Robert P. McDavid; Treasurer, George W. Ellis; Auditor and Comptroller, Walter S. White; Attorney-General, Charles G. Brown; Superintendent of Education, John W. Abercrombie; Commissioner of Agriculture, Isaac F. Culver, succeeded in September by Robert R. Poole; Adjutant General, W. W. Brandon; President of the Railroad Commission, James Crook; President of the Convict Board, S. B. Trapp; Back Tax Commissioner, W. J. Wood; Examiner of Public Accounts, John Purifoy; State Geologist, Eugene A. Smith; Chief Mine Inspector, J. de B. Hooper; Agent for Swamp Lands, W. M. Byrd; Chief Justice of the Supreme Court, Thomas N. McClellan; Associate Justices, Jonathan Haralson, John K. Tyson, Henry A. Sharpe, and James R. Dowdell; Clerk, Robert F. Ligon, Jr. All are Democrats.

The new State administration came in Dec. 1. For names of officers elected see under Political, this article. The office of Commissioner of Agriculture is created by statute, and the term begins Sept. 1, while the terms of the constitutional offices begin Dec. 1.

Population.—The census returns show no change in the order of the largest three cities

of the State. Mobile is still first with 38,469, against 31,076 in 1890. Birmingham has risen to 38,415 from 26,178 in 1890. The territorial limits of Birmingham have been enlarged since 1890. Montgomery, which had 21,883 in 1890, has now 30,346. The population of the other larger places is: Anniston, 9,695; Selma, 8,713; Huntsville, 8,068; Florence, 6,478; Bessemer, 6,358; Tuscaloosa, 5,094; Eufaula, 4,532; New Decatur, 4,437; Gadsden, 4,282; Opelika, 4,254; Phenix, 4,163; Troy, 4,095; Girard, 3,840; Pratt City, 3,485; Sheffield, 3,333; Dothan, 3,275; Greenville, 3,162; Decatur, 3,114; Avondale, 3,060.

Of the 66 counties, 2, Cleburne and Lawrence, have decreased slightly in population since 1890; all others have grown. The figures for the two dates are as follow:

COUNTIES.	1900.	1890.	COUNTIES.	1900.	1890.
Autauga.....	17,915	13,390	Henry.....	36,147	24,847
Baldwin.....	18,194	8,941	Jackson.....	30,508	28,026
Barbour.....	35,152	34,696	Jefferson.....	140,430	88,501
Bibb.....	18,498	13,824	Lamar.....	16,084	14,187
Blount.....	23,119	21,927	Lauderdale.....	26,959	23,739
Bullock.....	31,844	27,063	Lawrence.....	20,134	20,729
Butler.....	25,781	21,641	Lee.....	31,826	28,664
Calhoun.....	34,374	33,835	Limestone.....	22,387	21,201
Chambers.....	32,854	31,819	Lowndes.....	35,051	31,560
Cherokee.....	21,096	20,459	Macon.....	23,126	18,419
Chilton.....	16,522	14,549	Madison.....	43,702	36,119
Choctaw.....	18,136	17,526	Marengo.....	38,315	35,026
Clarke.....	27,790	22,624	Marion.....	14,494	11,947
Clay.....	17,099	15,765	Marshall.....	33,339	18,935
Cleburne.....	13,306	13,218	Mobile.....	62,740	51,587
Coffee.....	20,972	12,170	Monroe.....	23,666	18,990
Colbert.....	22,341	20,189	Montgomery.....	72,047	56,172
Conecuh.....	17,514	14,564	Morgan.....	28,820	24,086
Cook.....	16,144	15,906	Perry.....	31,733	29,332
Covington.....	13,246	7,526	Pickens.....	24,402	22,470
Crenshaw.....	19,668	15,425	Pike.....	39,172	24,423
Cullman.....	17,449	13,459	Randolph.....	21,647	17,219
Dale.....	21,182	17,225	Russell.....	37,063	24,063
Dallas.....	54,557	49,350	St. Clair.....	19,456	17,373
DeKalb.....	23,558	21,106	Shelby.....	23,684	20,886
Elmore.....	26,099	21,732	Sumter.....	32,710	29,574
Escambia.....	11,820	8,666	Talladega.....	36,773	29,346
Fayette.....	27,361	21,926	Tallapoosa.....	29,675	25,460
Etowah.....	14,132	12,823	Tuscaloosa.....	36,147	30,372
Franklin.....	16,511	10,681	Walker.....	25,162	16,079
Geneva.....	19,906	10,690	Washington.....	11,134	7,935
Greene.....	24,132	22,007	Wilcox.....	35,631	30,816
Hale.....	31,011	27,501	Winston.....	9,551	6,532

Finances.—The statement of the Auditor for the fiscal year, issued in October, showed a deficit of \$184,564.22. During the past four years the revenue has increased by about \$1,000,000 in all, and the deficit has been reduced \$168,389.35. The receipts for the seven months ending April 30 were \$2,243,191.53, and the disbursements \$1,428,179.28.

The valuations for the current year were: Real estate, \$158,025,028; personal property, \$108,218,142; total, \$266,243,170. The tax on real estate was \$874,573.42, and that on personal \$595,102.87. This does not include the figures for Winston County.

The last Legislature imposed an additional mill for the public schools, estimated to amount to about \$250,000, and an additional half mill for soldiers and widows of soldiers. The amount placed to the credit of the school fund Oct. 1 was \$442,810.19.

The State Supreme Court declared the revenue law passed in 1899 unconstitutional.

Education.—The number of school children by the last census was 633,546, of whom 282,879 were colored. The amount apportioned for public schools for the year ending Oct. 1 was \$672,239.47. The contingent fund was \$1,000, and the Winston County special appropriation \$800. Amounts appropriated to higher institutions were as follow: Troy Normal College, \$5,000; Florence Normal College, \$7,500; Livingston Normal College,

\$2,500; Jacksonville Normal College, \$2,500; Montgomery Normal College, \$7,500; Tuskegee Normal College, \$3,000; Huntsville Normal College, \$4,000. The total for distribution was \$710,817.62, of which \$4,778.25 was unappropriated. For the year ending Oct. 1, 1901, the amount for distribution was \$794,858.91, an additional mill having been added to the State tax for the support of schools. The average school year is about four and a half months.

Records of attendance at the various institutions for higher education have been published, as follow: Alabama Polytechnic Institute, at Auburn, 384 for the session 1899-1900; Southern University, at Greensboro, 150 at the opening in September; Lineville College, at Ashville, 300 in 1899-1900; Troy Normal College, 250 in September; West Alabama Agricultural School, 150 at the same date; Florence Normal College, 39 graduates in June; Tuskegee Normal and Industrial Institute, more than 800 enrolled by Sept. 29; State University, at Tuscaloosa, 233 by Sept. 28, not including the medical department, at Mobile.

The sale of university lands at prices believed to be far below their value was declared by the trustees to be illegal, and suit was brought to annul it.

Military.—From the statement issued by the Adjutant General it appears that the organized military force of the State is 2,471, while the number of men available for military duty, but unorganized, is 165,000. The Adjutant General estimated in the summer that about 80 per cent. of the State Guard would volunteer for service in China if called upon. The State appropriated \$12,500 for encampment expenses, and the entire amount was used, together with funds subscribed in Mobile and Birmingham.

The number of persons allowed pensions this year was 11,214; in 1899 it was 9,628. The amounts available for distribution were \$105,506 the former year and \$244,303 the present.

The Governor and other citizens of the State made a trip to New Hampshire in September, on the occasion of the presentation of tablets to the battle ships Kearsarge and Alabama. The Governor of New Hampshire gave to Gov. Johnston two Confederate flags captured by two New Hampshire soldiers in front of Petersburg—the only captured flags that had not been turned over by the State to the National Government. The regiments and States to which they belonged were unknown. The Governor and members of his staff sent afterward to the Governor of New Hampshire a loving cup bearing the motto "Non Armis sed Amore Victi."

Talladega.—The Andrew Jackson Chapter of Daughters of the American Revolution asked and received permission to remove from the battlefield of Talladega the remains of the 17 Tennessee soldiers who fell there Nov. 9, 1813, and to reinter them in the city cemetery. The battlefield has passed into the possession of a coal and iron company, and the Talladega furnace stands on the grounds.

Mobile.—The increase of the commerce of Mobile during the past decade is given as being nearly threefold—from \$3,479,444 to \$10,485,072.

Insurance.—From the report of the Insurance Commissioner it is learned that 115 companies are doing business in the State. Five retired during the year and 16 came in. The net gain to the State from the office was \$50,000.

Products.—In the production of iron ore in 1899 Alabama took the third place among the States, with 1,009,327 tons.

The coal product for the year was estimated at not less than 8,500,000 tons.

The cotton acreage in 1900 was 2,911,167, an increase of $5\frac{1}{2}$ per cent. The estimate of the crop made at the Convention of Cotton States Commissioners at Raleigh, in August, gave it as 821,000 bales. The consumption of cotton in the mills of the State, by Mr. Hester's estimate, was 137,922 bales.

The Dispensary.—The dispensary law passed by the last Legislature, applying to some counties, went into effect Jan. 1. Some of the larger towns in counties where it applies are excepted. According to newspaper report, candidates favoring it in some counties where primaries were held found the question rather a drawback to their popularity.

Lawlessness.—A negro guilty of criminal assault was taken from jail at Huntsville, July 23. The sheriff made a brave resistance to the mob, but the doors were battered down, dynamite was thrown into the prison, and the man was hanged just before the arrival of militia from Decatur. In October a negro boy, sixteen years old, was burned at the stake near Eclectic for the same crime. In August part of a letter was published said to be written by the supreme commander of the so-called Regents of the White Shield in Alabama to a woman who was reported to be about to lead an army of negroes to avenge the lynching of a Southern negro. The extract from the letter read: "It gives me pleasure to inform you that the Regents of the White Shield are a very substantial body of organized patriots, who are ready to receive you and your Ethiopian escort and extend such other service as would be appropriate to express our contempt for a white with a black heart and at the same time to add another hue of darker shade to that of Hades. So come on, fair Joan of Arc, and don't be too modest about the number of black crusaders you bring with you. Ten thousand are not enough to tax our hospitalities in furnishing you sleeping accommodation in our potter's field. In conclusion, let me state that as we raise large crops of cotton in this section we have an abundant supply of rope on hand for every emergency, and we'll know when and how to use it."

Political.—The primaries in April resulted in a victory for John T. Morgan as candidate for re-election to the United States Senate. There were originally 4 candidates: Senator Morgan, Gov. Johnston, W. C. Oates, and J. D. Roquemore. Col. Roquemore died and Gen. Oates withdrew, leaving the contest to the two first named, who "stumped the State" before the primary elections. The proposed constitutional convention and the so-called "land scandal" (see Annual Cyclopædia for 1899, page 4) played a prominent part in the campaign. Senator Morgan carried all the 55 counties that acted on the senatorship, and he was chosen by the Legislature, Nov. 15.

The State elections were held Aug. 6. There were 4 tickets in the field, as follow: For Governor, William J. Samford, Democrat; John A. Steele, Republican; G. B. Crowe, Populist; H. L. Hargett, Prohibitionist.

For Secretary of State, Robert P. McDavid, Democrat; John H. Porter, Republican; T. W. Powell, Populist; L. F. Whitten, Prohibitionist.

For Auditor, T. L. Sewell, Democrat; J. C. Swan, Republican; M. W. Whatley, Populist; R. O. Simpson, Prohibitionist.

For Treasurer, J. Craig Smith, Democrat; Pope M. Long, Republican; O. L. McKinstry, Populist; D. C. Batchelor, Prohibitionist.

For Attorney-General, Charles G. Brown, Demo-

crat; C. D. Alexander, Republican; Leroy Watson, Populist; H. L. Martin, Prohibitionist.

For Superintendent of Education, John W. Abercrombie, Democrat; James I. Abercrombie, Republican; W. M. Wood, Populist; — Porter, Prohibitionist.

For Commissioner of Agriculture, Robert R. Poole, Democrat; John B. Shields, Republican; J. M. Askew, Populist; C. D. Alverson, Prohibitionist.

Walter H. Matthews was nominated for the office of Auditor at the Democratic convention, but died in July, and the State committee filled the vacancy.

Samuel M. Adams was the nominee of the Populist convention for Governor. He declined because he disapproved the policy of the naming of a State ticket by his party. A. G. Dake declined the nomination for Treasurer, and the two vacancies were filled as above.

Following is an abstract of the principal declarations of the Democratic platform: "An honest and economical government. A scrupulous regard for the American Constitution. For commercial expansion. The construction of the Nicaragua Canal. Denunciation of unjust treatment of Porto Ricans. The legitimate expansion of home and foreign trade. The regulation of trusts and riddance of the protective tariff. Belief in renomination of W. J. Bryan and a demand for his renomination. Belief in the Chicago platform, but no demand or instruction for its reaffirmation. The furtherance of public education."

The more important articles in the Populist platform were: "That we advocate and urge upon all voters who are opposed to the liquor traffic the necessity of supporting candidates who favor the dispensary system as an improvement upon the license system. That we condemn in unmeasured terms the proposed constitutional convention as being inimical to the best interests of the people of Alabama. That we condemn the resolution passed by the late Democratic convention which recommends that defeated Democratic candidates for the Legislature be consulted in regard to local legislation."

The Republicans were divided into two factions at the time of their State convention, in April. The dispute over the right to control resulted in violence, during which a young man was seriously wounded. The differences were adjusted later, and in July the State committee put out the ticket with candidates drawn from both factions.

All the Democratic candidates were elected in August. The vote for Mr. Poole, the Democratic candidate for Commissioner of Agriculture, was 105,429; for Mr. Shields, Republican, 21,525; for Mr. Askew, Populist, 14,131; and for Mr. Alverson, Prohibitionist, 2,203. This makes a total of 143,288 votes cast. This is much less than the regular vote of the State. The vote for Governor would probably show larger figures, but the returns are not at hand. The Democratic majority was given in round numbers as 75,000. The Legislature is overwhelmingly Democratic. One Senator holding over is a Populist, and the Populists and Republicans have about 9 Representatives.

At the November election Democratic congressmen were elected in all the 9 districts. The Bryan electoral ticket was successful.

ANGLICAN CHURCHES. Statistical.—The Official Yearbook of the Church of England gives the number of communicants of the Established Church as 1,941,760, with church accom-

modation for 6,979,150 persons; number of pupils in Sunday schools, 2,394,804, with 207,539 teachers; net clerical income, £3,357,006; amount of voluntary contributions, £5,954,738; number of incumbents, 13,873. Another table of voluntary contributions given in the work increases the total and allots them as follows: I. To central and diocesan societies and institutions: (1) home missions, £548,881 4s.; (2) foreign missions, £772,246 9s. 1d.; (3) educational work, £119,387 10s. 5d.; (4) the clergy (educational and charitable assistance), £197,195 19s. 8d.; (5) philanthropic work, £428,273 6s. 2d.; total, £2,065,984 9s. 4d. II. Funds locally raised and locally administered: (1) for the parochial clergy, £798,521 4s. 11d.; (2) for elementary education and Sunday schools, £1,177,288 15s. 7d.; (3) for general parochial purposes, £3,422,639 15s. 1d.; total, £5,398,449 15s. 7d. The total voluntary contributions thus amounted to £7,464,434 4s. 11d.

Statistics furnished by 990 out of 1,000 incumbents of Welsh parishes give the number of communicants in them as 133,223.

The accounts of the Representative Body in the Episcopal Church in Ireland showed that the amount of voluntary contributions had decreased by nearly £40,000. Yet a balance was left of £80,000 over the expenditures.

The Synod of the Episcopal Church in Ireland was held in Dublin in April. The primate, in his inaugural address, referred to the considerable decline of voluntary contributions which had taken place, and to the decrease of the receipts from assessment. The synod, however, possesses a capital fund of £8,000,000.

Grants were made from the incorporated Church Building Society during 1899 to 34 new churches and 25 mission or temporary churches, besides 6 grants for rebuilding churches and 28 for enlargements. The total cost of the proposed church works was £297,217, while the society's grants were £16,035, in addition to £665 for mission buildings. The society had since its formation given £885,143 toward works involving a further expenditure of £14,840, and adding about 2,000,000 seats, three fourths of which were free. The year's income had been £6,869.

The annual report of the Bishop of London's fund, presented May 10, showed that the receipts for the year had been £28,172 and the payments £25,709. The temporary investments amounted to £36,913. Up to the end of the year sums aggregating £1,052,722 had been received for the fund, including £3,000 from the Queen, £1,000 from the Prince of Wales, £25,000 from the Commissioners of Woods and Forests, £25,681 from city companies, and a number of large gifts from individuals. The past year's grants had amounted to £5,067 for clergy, £3,058 for lay agents, £7,099 for mission buildings, £6,725 for churches, £319 for vicarages, and £676 for schools.

At the annual meeting of the Additional Curates Society, April 30, the secretary reported that the general income of the society for 1899 showed a decrease of £1,500. An increase of £700 over the corresponding period of the previous year had, however, taken place during the past four months. The last year's expenditures had been £58,785. Aid had been given to 1,020 parishes with 1,217 grants, amounting to £56,968.

The two hundred and forty-sixth festival of the Sons of the Clergy was held May 9. The total number of pensions and grants in 1899 was 1,689, on account of which £24,374 were paid.

Society for the Propagation of the Gospel.—The annual meeting of the Society for the Propagation of the Gospel in Foreign Parts, marking its

two hundredth anniversary, was opened April 27. The report showed that the gross income of the society for the year had been £136,846, indicating an increase of £4,490. The number of ordained missionaries, including 12 bishops, was 785, distributed as follows: In Asia, 253; in Africa, 185; in Australia and the Pacific, 47; in North America, 209; in the West Indies and Central and South America, 53; and 38 chaplains in Europe. Of these, 135 were natives laboring in Asia and 48 in Africa. There were also in the various missions about 2,000 lay teachers, 3,200 students in the society's colleges, and 38,000 children in the mission schools in Asia and Africa. With the exception of North America, it might be said that in every part of the empire, and beyond its limits, the work of the Church had been hindered in the past year by disasters and visitations which no human foresight could have reckoned with. The London Junior Clergy Missionary Association had advanced in work and in numbers, having now 500 members against 430 one year previously. The federation of all the Junior Clergy Associations numbered more than 5,000 members.

The two hundredth anniversary of this society was celebrated in London, June 16, 17, and 18. The exercises began June 16, the anniversary of the foundation of the society, with a communion in St. Paul's Cathedral, followed by a sermon by the Right Rev. W. C. Doane, Bishop of Albany. The bicentenary was the subject of special sermons in a large number of churches in London, Sunday, June 17. On Monday, June 18, a public evening meeting held in Exeter Hall was addressed by the Archbishop of Armagh and the Bishop of Kentucky. An historical review was read, which showed that the Society for the Propagation of the Gospel was established for the purpose of instituting a central organization to superintend the ministers of the Church of England who were sent out to serve the spiritual wants of the people in the colonies in America and elsewhere. It dates its origin from March 13, 1701, when a committee was appointed to inquire into the best means of promoting the Christian religion in the plantations (as they were called) or transmarine colonies. A charter was granted the society by William III in the following June, the object of the body being defined as "the religious instruction of the king's subjects beyond the seas," and the first two missionaries left a few months later for Boston, Mass.

One of the principles strongly held to by this society in its missionary work is that of caring for the religious welfare of all subjects of the Crown, without distinction of race or color. Its work has never, therefore, been limited to the conversion of the heathen to Christianity, although that is a most important part of its operations; but it has always endeavored to supply colonists with the means of maintaining those religious observances which they enjoyed in the mother country, and to do this by supporting clergy, endowing bishoprics, founding theological colleges, and other acts of similar nature. The first region in which the society carried on its work was that of the North American colonies, where the churches founded by it and their branchings have become the Protestant Episcopal Church in the United States. Newfoundland was another early object of the society's attention, where help was first sent in 1703, and 59 clergy are now laboring. The first colonial bishop, Bishop Inglis, whose diocese covered all British North America from Newfoundland to Lake Superior, was consecrated in Nova Scotia, Aug. 12, 1787. Since the establishment of its missions there the society has maintained in Canada 1,500 ordained missionaries, who have ministered

to races speaking 16 languages, and has expended on church work, including endowments of bishoprics and colleges, £1,867,852. In the West Indies and Central America the society has expended upward of £644,000. The first missionary to Africa was sent to the Gold Coast in 1752. With the first attempt at a regular colonization of South Africa, the first clergyman sent out by the society was stationed at Wynberg, near Cape Town, in 1820. At the present time there are 10 dioceses in South Africa between Cape Town and the Zambesi; and during the eighty years of its work the society has helped endow 8 of these dioceses, maintained 545 missionaries, and spent £821,395. It still has 155 missionaries among the 370 clergymen in South Africa, 23 of whom are natives. Work was begun in Australia in 1793, and the country was made a diocese in 1836. There are now there 15 bishops and about 850 clergymen. The society's expenditure in Asia has amounted to £2,340,799. Of 781 clergymen in India, 169 are chaplains maintained by the Government, 38 others are employed by the additional clergy societies and ministering to Europeans, 53 are engaged in educational work, and 521 are missionaries proper, 245 of whom are natives of the country, in the great majority of cases supported by their own people. Other fields of the work of the society to which it has made liberal grants and where active labors are carried on among both colonists and the native populations are Mauritius and Madagascar, New Zealand and the Pacific, Borneo and the Straits Settlements, China, Japan, and Korea. The expenditure of the society throughout the world during the one hundred and ninety-nine years of its existence has amounted to £6,419,608; of the 94 colonial and missionary bishoprics now existing it has helped to endow 45; and at the present time it is wholly supporting 5, and partially 7, bishops. It also supports 787 missionaries, working in 55 dioceses and preaching the Gospel in 54 languages or dialects.

On Tuesday, June 18, an address from the Church Missionary Society was presented by Bishop Doane, and was acknowledged by the archbishop. Greetings were received from New Jersey, Connecticut, and Rhode Island, and an address was delivered by the primate. The Marquis of Salisbury was introduced, and made an address expressing sympathy with the cause of missions, but recognizing certain dangers that were likely to arise when their work is followed by commercial adventure and the intrusion of political schemes, and the missionary might be made to play a part against his will for these things. In closing, he said: "The world, however slowly, is traveling to a point where the government of all races will be not by organized force but by recognized and advancing public opinion. You have in your hands one of the most powerful and one of the most sacred forces that ever acted on opinion, and the results for which we all pray will be dependent not only on the zeal, but also on the wisdom and Christian prudence with which you work." The Bishop of Kentucky was another speaker. A resolution of humble thankfulness was proposed by the archbishop and seconded by the Bishop of Albany.

Church Missionary Society.—The one hundred and first annual meeting of the Church Missionary Society was held in London, May 1, Sir John Kennaway presiding. The treasurer's report showed that the gross income of the society for the year had been £404,905, of which £32,883 had been derived from legacies, £80,619 taken from the centenary funds, and £20,611 had come in the form of special funds not available for ordinary purposes. Omitting the two latter items, £303,675

were left to constitute the net proper income. The expenditures had been £367,268, of which £14,002 had been from the special funds. The centenary gifts had amounted to £198,948. This sum had been variously appropriated, with the exception of £16,280, which were kept in reserve for future contingencies. The society had in its mission fields 520 stations, which were manned by 418 ordained and 140 lay missionaries, 358 native clergy, and 6,459 native lay teachers; 71,051 native communicants, 268,240 native adherents; 2,144 schools with 104,388 pupils; and in the medical missions, furnished with 1,484 beds, 11,457 in-patients and 630,356 out-patients had been treated. The baptisms numbered 19,161. A resolution was passed earnestly welcoming every effort aiming at the full and orderly development of native churches, as the speedy evangelizing of the world before the coming of the Lord depended very largely upon the labors of the Christian people of non-Christian lands. A message of greeting was sent to the Society for the Propagation of the Gospel, which was celebrating its two hundredth year.

Universities' Mission.—The report of the Universities' Mission in Central Africa showed an income of £37,549, nearly £9,000 less than in the previous year. The expenditure had been £43,279.

Church Army.—The reports of the Church Army made to the annual meeting, May 2, showed that 116 trained workers had been added to the staff during the year. The demand for such workers far exceeded the supply. The income of the general and evangelistic account was returned at £54,022. The previous year's deficit of £1,718 had been reduced to £1,364. In the social departments the income had been £54,557 and the expenditure £55,779, but a balance of £4,404 still remained. The assets were £49,538 in excess over liabilities. The financial requirements of the coming year would amount to £173,000. The workers of the army had obtained admission to the convict prisons.

Liberation Society.—The Council of the Society for the Liberation of Religion from the Patronage and Control of the State held its annual meeting in London, May 2, Mr. Alfred Thomas, M. P., presiding. The report referred to the prospective amendment of the burial laws and the failure of the movement for obtaining a census of religious opinion. The tithe rent charge (rating) act was mentioned as having contributed much to promote the sentiment among the electorate against a church establishment. The report dwelt upon the educational condition, and regarded with regret the disposition on the part of influential men to accede to the demand for a Roman Catholic university for Ireland. The income of the society had fallen from £5,093 to £4,311. Resolutions were adopted urging upon the Liberal party, in view of a general election, to give a prominent place to disestablishment; appealing for such additional subscriptions as would enable the society to seize the unprecedented opportunities for extended work presented by the course of events in the Church of England and by the change in the opinions of a large majority of the members; calling on the friends of religious equality to press the subject on liberal organizations as one of the most urgent matters demanding legislative action; and describing the events of the past year in the English establishment as confirming the conviction that neither legislation nor the bishops' action would prove effectual in suppressing sacerdotalism or lawlessness.

Church Reform League.—The Central Representative Council of the Church Reform League reported to the annual meeting of the league, May

25, resolutions recommending the giving of power to the convocations to reform their own clergy, to constitute in connection with themselves representative houses of laymen, and to arrange for the joint sitting and acting of the two convocations and houses of laymen as representative bodies.

Missions to Seamen.—The report of the Missions to Seamen, presented at the annual meeting, May 2, represented that the expenditure in 1899, £42,514, exceeded the income by £3,898. Sailors had given £1,535 in offertories, had bought 5,741 Bibles and Prayer Books, and had furnished 98,500 attendances at 13,500 services or Bible readings afloat and 348,000 attendances ashore.

The Convocations.—At the meeting of the Convocation of Canterbury in February (Feb. 6) petitions were presented in the upper house from two rural deaneries in the diocese of Truro, praying the house not to initiate or take coercive measures to enforce compliance with the recent decision of the archbishops concerning incense and processional lights unless their lordships were prepared to enforce strict compliance to the Prayer Book impartially on all alike, having regard to variations of defect as well as of excess. A prayer was included in one of the petitions that their lordships would take steps in the endeavor to gain for the Church of England a larger power of self-government than it had at present, but not self-government incompatible with the position of an established church. In view of the failure of the two convocations in 1899 to agree upon a joint report upon ecclesiastical courts, a committee of conference with the committee of the Convocation of York was appointed. The resolutions passed by the lower house in February, 1899, respecting missions to Israelites, were agreed to. They recognize the title of such missions to special attention; advise co-ordination of the several agencies engaged in the work so as to avoid overlapping and wasteful expenditure; emphasize the responsibility laid upon incumbents by the presence of many Israelites in their parishes; advise the provision of prayers for the salvation of Israel for the annual day of intercession for missions; and invite the attention of divinity and other professors to the existing need of clergy to undertake the Jewish side of parochial work.

In the lower house, the prolocutor having resigned, Archdeacon Reginald Prideaux Lightfoot, of Oakham, was chosen to that office. A resolution was passed affirming the necessity of the spiritual agencies of the Church, and a committee was appointed to consider and report as to the desirability of a revival of the subdiaconate. A second report, drawn up by a joint committee, on clergy pensions, which explained in detail the work of the clergy pensions institution, was adopted in both houses.

A resolution was adopted in the House of Laymen, asking for a joint committee of the two convocations to consider and report upon the best means of securing a fit and adequate representation of the laity in the House of Laymen of each province.

At the meeting of the convocation, May 8, the upper house, upon the presentation of an article adopted by the lower house on the subject of temperance legislation, resolved unanimously, "That it is desirable that a bill be drafted and submitted to Parliament based upon such recommendations contained in the final report of the Royal Commissioners on Liquor License as are common to the majority and the minority reports of the commissioners." The Committee on Ecclesiastical Courts reported progress, representing

that they desired to confer with the committee of the Convocation of York on the subject. The Committee on the Position of the Laity in the Church submitted a statement that they had not yet been able to prepare their report. The question was a large and important one. The committee of the Convocation of York, with whom they had conferred, had appointed a committee of experts to examine fully the historical aspect of the question, and they were waiting before presenting their own conclusions until the report of that committee had been drafted.

A resolution was passed contemplating the appointment of a joint committee to confer with a committee of the House of Laymen to consider the desirability of appointing a central Church committee to work with the chaplain general and the chaplain of the fleet for all purposes concerning the moral and religious welfare of soldiers and sailors and their families, and the status of chaplains working among them. A draft bill was brought forward by the Bishop of Rochester which was characterized as an attempt to promote the object of giving the Church more voice in its own affairs. It did not deal with the question of the best means of carrying out the reform of Convocation, or of how the houses of laymen could be recognized by Parliament; but it aimed to provide a method by which, if it should please Parliament that power should be given, Convocation itself could take the initiative in the matter. The archbishop gave notice to both houses that the Archbishop of York and he had agreed to summon a meeting of both convocations in the form of committees, to meet July 5 and 6. In the consideration of the resolutions of the lower house on elementary education, an amendment was suggested proposing that voluntary schools should receive support from the public funds. The lower house approved the elementary education bill introduced into the House of Commons by Sir John Gorst and the Government burials bill, except as to certain sections, respecting which further information was desired. The action of the upper house contemplating the appointment of a joint committee on the moral and spiritual welfare of the soldiers and sailors was concurred in. The report of the Committee on the Supply and Training of Candidates for Holy Orders, embodying a series of recommendations to the schools, was adopted. A report on the reform of Church government was approved, to the effect that in the opinion of the house the next step toward the attainment by the Church of a greater measure of autonomy should be to urge her Majesty's Government to introduce a bill into Parliament declaring, first, that the convocations have power to reform their own constitution in respect of the representation of the clergy; second, empowering the convocations to constitute in connection with themselves co-operative houses of laymen; and, third, authorizing arrangements being made by the two convocations and houses of laymen for their joint sessions. The house expressed an earnest hope that legislative effect might be given to such of the recommendations contained in the final report of the Royal Commission on the Licensing Laws as received the support of all the commissioners. It also expressed general approval of the burial grounds bill.

At the meeting of Convocation, July 4, a discussion took place in the upper house over the report of the committee of the lower house on the supply and training of candidates for holy orders, in which the fact was brought into view that the number of candidates was diminishing at a time when the population of England was rapidly in-

creasing. Yet, although the circumstance had escaped notice, the number ordained into the Anglican communion outside of England had largely increased in recent years, and it was only fair to assume that there were some in that number who would otherwise have been ordained for work in England. The inadequate pay of the clergy was regarded as the chief cause of the decline, and questions on matters of belief and the attractions offered by other careers in various parts of the empire were mentioned as other possible causes. In the lower house resolutions were passed approving of the draft bill for the reform of Convocation. The report of the Committee on Elementary Education, embodying suggestions concerning the organization of school boards, was adopted.

Both houses resolved themselves into committee in order to sit in committee of the two convocations on the following day.

In the Convocation of York, Feb. 22, a joint committee was appointed to confer with the joint committee appointed by the Convocation of Canterbury on the subject of the reform of ecclesiastical courts. A resolution was adopted in the upper house directing the appointment of a committee to consider and report on the rights and responsibilities of the state "as intrusted in the Divine order with the guardianship of property and with coercive powers." In the lower house a gravamen protesting against the remarriage of divorced persons was made an *articulus cleri*.

The Convocation met again, April 25. A resolution was carried in both houses expressing the opinion that the points of agreement between the majority and minority reports of the Royal Commission on the Licensing Law constituted a practical basis for legislation. The upper house adopted the alternative evening service presented at its previous session, with the proviso that it was to be observed as an alternative service in mission churches and as "additional" elsewhere. A proposition was approved favoring the insertion of the name of St. Patrick in the calendar of the Prayer Book. The committee appointed at the last group of sessions to consider and report on the rights and responsibilities of the state as intrusted in the Divine order with the guardianship of property and with coercive powers presented as their opinion that "the true basis and character of the committee of appeal, as representing the state, not the Church, will be best understood, and the limited range of its decisions most clearly recognized, if it be divested altogether of ecclesiastical appendages and appearances, expert theological opinion and information being obtained as expert opinion is obtained in other cases, and in such a way as neither to compromise the Church in its corporate capacity nor to interfere with the final responsibility of the state in temporal matters." A suggestion was approved in the lower house in the consideration of the report of the Committee on Elementary Education that it would be expedient for the committee of the Convocations of Canterbury and York to meet in consultation with the standing committee of the National Society and the secretaries of the Aid Grant Associations to consider the question of the constitution and powers of the proposed local educational authorities. The report of the parliamentary committee on the burial grounds bill was received as a measure which might very well be welcomed. This bill was likewise approved in the House of Laymen. A motion, offered by Lord Halifax, "that inasmuch as the main object of the acts of uniformity of 1559 and 1662 has been definitely abandoned by the toleration act

of 1690 and the repeal of the test act and other acts of the same kind, the question of the repeal of the acts of uniformity should be seriously considered," was defeated in the house by 22 votes to 4.

The Convocation met as one house, July 4, and resolved itself into committee of the whole in order to meet a similar committee of the Southern Convocation in the Church House, Westminster, on the next day.

Joint Meeting of Convocations.—The two convocations, meeting jointly as committees of the whole, July 5 and 6, agreed "that it is desirable to strengthen the organization of the diocesan and provincial courts in such a way that complaints concerning ritual or doctrine should be tried in the diocesan court in the first instance; and that if an appeal be carried to the provincial court, it should be heard before a body of judges who would command general confidence; second, that the bishop sit in the diocesan court, accompanied by two theological and two legal assessors"; and, third, that appeals to the provincial court be heard and determined by the archbishop and two episcopal, two legal, and two theological assessors appointed by the archbishop, the episcopal assessors with the assent of the upper, and the theological assessors with that of the lower house of the Convocation. The meeting also expressed a desire "to see the laity of the Church taking their definite place in the management of the affairs of the Church in the parish, the diocese, and the province," and commended the matter to the convocations and the houses of laymen.

The Ritualistic Agitation.—In a pastoral issued in December, 1899, the Archbishop of York represented that the great majority of the clergy who had adopted the doubtful practices reviewed in the decision of the archbishops of July 31 (see *Annual Cyclopædia* for 1899) had yielded obedience to their bishops. There was still, however, a remnant of 30 out of the 300 clergymen implicated who had declined to comply—a number which in the whole of the clergy of the Church of England need occasion little anxiety. That small number, however, had power to do harm. The archbishop thought the bishops would not of themselves prosecute the nonconforming clergy, although they had the power, but that it was unlikely that they would place any impediment in the way of others who desired to take that step. As to the disobedient clergy, it would be impossible to give them the same advantages as were freely granted to the other clergy, or to place the same confidence in their judgment, and particularly in their fitness for dealing with their younger brethren as they would otherwise have deserved. The archbishop further discussed the possibility of the law concerning the abandoned customs being changed through the action of Convocation, sanctioned by the Crown.

A deputation waited on the Archbishop of Canterbury, Jan. 19, to express, on behalf of themselves and other signatories to a written protest which was handed to his Grace, their objections to the opinion of the two archbishops on the ceremonial use of incense and processional lights. The protest, to which 13,794 signatures were attached, was based on the following grounds: "First, that your Grace has attempted not merely to define by an individual and autocratic exercise of power the ceremonial practice of the Church in this land, but also to press such definition upon dioceses of which your Grace is not the ruler, and, however ready your Grace's suffragans may be to submit to this, we as Catholic lay people must strenuously protest, and will resist to the utmost, a prece-

dent which may lead us into a position differing but little from that against which the Church rightly protested three hundred years ago. Secondly, we protest against your Grace's attempt to foist upon the Church, as her rule of ceremonial, a penal act of Parliament passed in days of regal autocracy, and intended to meet circumstances entirely different from those of to-day. And we are the more aggrieved because we were led to suppose that your Grace had intended to investigate the question upon the principles of Catholic law and custom and liturgical science, and not upon the construction of the alleged law of the state."

The Duke of Newcastle and Lord Edward Spencer Churchill spoke in support of the protest. The archbishop, replying to the addresses of these gentlemen, began with a reference to the closing sentence of the paper, saying he was quite certain that it would be impossible to quote any words of his that could fairly be said to convey the impression mentioned there as held by the protesters. "I gave no one to suppose," he said, "that I intended to investigate the question upon any other principles but the principles, as I understood them, of obedience to the law of the Church itself, and particularly of obedience to the law of the Church of England." He then reviewed the reasoning of the opinion, the grounds on which it was based, and the method of procedure adopted, justifying the course of the archbishops in reaching it, and intimated that the opinion need not be taken as a command to obey unless the bishops enforce it upon their clergy. "It is left for the bishops to call upon the clergy to take this opinion, but if they do not choose to act in this way that, of course, would set the clergy in that diocese perfectly free from obedience to that opinion. The clergy may very fairly say in that case, 'My bishop does not call upon me to obey this opinion, therefore I am not bound by it,' but there is not a word in the opinion which shows the smallest desire to set aside the separate opinion of the separate bishops in their various dioceses. It appears to me to be not quite borne out by any arguments that have been put before me, though some of the arguments that have been put before me do really express something more than is in the protest."

The Bishop of London, in his primary charge to the clergy of his diocese, delivered in St. Paul's Cathedral, Feb. 21, reviewed the principal questions in controversy as to their history and their significance. He took into account the motives of the reformers of the sixteenth century in introducing the changes they made in the Prayer Book, the differences in the thought and custom and conditions of that time and of the present, and the motives and purposes by which the partisans of both sides of the present controversy were animated. As to the questions concerning the holy communion, the bishop affirmed that the reformers in the later years of Henry VIII avowedly pursued the object of turning the mass into a communion, their purpose being to get rid of the abuses which had grown up around the idea and practice of the mass. The further changes made in the second Prayer Book of Edward VI were prompted by a doubt whether the first Prayer Book had adequately succeeded in this object. On this ground it was thought wise to drop the word mass in the second book, and to incorporate a condemnation of the mass in the Articles of 1553. "This is the object which the Church of England has ever pursued, to make the holy communion a service for the people to which they came prepared to receive the gifts of grace in the way which Jesus had appointed.

Our own time has seen a fuller accomplishment of that object than any previous period has witnessed. . . . It is greatly to be regretted that this advance toward the due appreciation of the mind of the Church should be checked by anything which even remotely suggests a desire to return to that perception of the holy communion which was so pernicious." The bishop traced the origin of "fasting communion" to the customs of the sixteenth century, when the hours for meals were so fixed that it was most convenient to attend the communion service before the midday meal. Customs "were not meant to be burdens to generations whose habits of life had changed."

The position of the Church of England on confession was that it was left to every man's discretion. It was not to be enjoined, still less was it to be enforced, by the clergy. Every one was advised to try and quiet his own conscience first, and if he needed further help he might seek it at his own responsibility. "The Church does not impose confession as a discipline; it recommends, in the first place, confession to Almighty God; it reserves private confession for cases where a man is unable to quiet his own conscience. No teaching should be given by the clergy which does not state all these facts." Further, the Bishop of London wrote, Feb. 26, to a correspondent who inquired of him: "Confession is a private and personal matter. There is no service provided for it except in the case of the sick. If any one seeks a clergyman's counsel and advice, he does so of his own free will. A clergyman is called 'a minister of God's Word.' He can only minister that Word, and his advice, in whatever form it is given, must rest on that, and that only."

At the annual meeting of the Protestant Alliance, April 25, resolutions were adopted expressing the belief that the revival of the mass, auricular confession, and other Roman Catholic practices was disastrous to the spiritual and moral welfare of the people; pledging the meeting to uphold the scriptural principles of the Reformation as the only effective guarantee of religious and civil freedom; and approving the endeavor of the Alliance to organize Protestant electors so as to return members of Parliament pledged to support legislation for the maintenance of those principles. Other resolutions expressed alarm at the continued lawlessness of a large section of the Anglican clergy and the culpable neglect of duty on the part of the authorities of the Established Church, as well as the delay of the Government in fulfilling their pledges to introduce a measure for the compulsory discontinuance of "Romish" practices; recording a renewed determination to continue the agitation against the illegalities complained of until they shall be effectually dealt with; and declaring that "in view of the increasing efforts of papal propagandists to restore the pre-eminence of sacerdotal authority in this country, the toleration of priestly interference in any measure with the affairs of the state is inconsistent with civil and religious freedom."

In A Further Indictment of the Bishops and of the Government (issued in April), the Church Association maintained that the bishops had continued to aid and abet lawlessness in the Church of England. Members of the English Church Union and of the Confraternity of the Blessed Sacrament had during the past year received promotion at the hands of the Archbishops of Canterbury and York and the Bishops of London, Durham, Winchester, Bangor, Chichester, Ely, Exeter, Carlisle, Gloucester, Lichfield, Lincoln, Llandaff, Newcastle, Oxford, Peterborough, Rochester, St. Albans, Salisbury, Worcester, and Truro.

At a meeting of the Ladies' League for the Defense of the Reformed Faith of the Church of England, held March 22, Lady Wimborne, presiding, explained that the work of the league was mainly educational. Its endeavor was, by the circulation of suitable literature and the delivery of lectures in various districts, to diffuse a wider knowledge of the history of the Church and of its teachings regarding the great doctrinal truths.

The Ladies' Protestant League was organized in 1899 for the purpose of enlisting the influence of women in opposition to ritualism. It was represented at the meeting held in London, May 10, that 2,000 members had been enrolled. The sum of £10,000 was needed for the establishment of a young ladies' high-class boarding school with teaching in accordance with the principles of the Reformed and Protestant Church of England.

On June 18 deputations representing the Church Association and other Protestant bodies waited on Sir W. Walrond, chief Conservative whip, and Mr. Herbert Gladstone, chief Liberal whip, to urge the necessity for Church reform and for the adoption of candidates prepared to put down ritualistic excesses by further legislation. Sir W. Walrond declined to go into the question of policy or to criticise the advisability of making the Church question a test at the next general election, but assured the deputation that headquarters would give them any assistance in their power, and that he would inform Mr. Balfour, who he was sure was alive to the gravity of the situation, of what had happened. Mr. Herbert Gladstone said that he could not undertake the responsibility of the Liberal party, but would communicate with Sir Campbell Bannerman and his colleagues.

At the thirty-fifth annual meeting of the Church Association, in May, Captain Cobham, presiding, claimed that much had been done by the society during the past year in concentrating and making effectual the Protestant vote of the country. The annual report accused the archbishops themselves of illegally encroaching upon the rights of the Church. A resolution was adopted pledging the meeting to support only Protestant candidates at parliamentary elections.

At the anniversary meeting of the English Church Union, held in the Church House, June 21, the following declaration, proposed by Lord Halifax, was adopted by a standing vote: "We, members of the English Church Union, holding fast to the faith and teaching of the one Holy Catholic and Apostolic Church—that in the sacrament of the Lord's Supper the bread and wine, through the operation of the Holy Ghost, become, in and by consecration, according to our Lord's institution, verily and indeed the body and blood of Christ, and that Christ our Lord, present in the same most holy sacrament of the altar under the form of bread and wine, is to be worshiped and adored—desire, in view of present circumstances, to reaffirm, in accordance with the teaching of the Church, our belief in the verity of the Christian faith, and to declare that we shall abide by all such teaching and practice as follow from this doctrine of the whole Catholic Church of Christ." Other resolutions declared that the Church Union, believing that many of the differences which divide the members of the Church of England are largely due to misunderstandings, and are often more apparent than real, expresses its thankfulness that the holding of a conference for mutual explanation has been brought before the London Diocesan Conference, and the desire of its members to support by all means in their power this effort to promote the peace of the Church,"

and "that the Church of England can not discharge her responsibilities unless she herself freely interprets her own formularies and is free to take all such other steps as in the light of her living experience she may deem necessary for the spiritual welfare of the people committed to her charge."

It was represented, pending the adoption of the annual report of the council of the union, that the organization had now nearly 40,000 members, the increase having been as great during the past thirty months as in the previous eight years.

Reservation of the Sacrament.—The Archbishops of Canterbury and York gave decisions, May 1, on three cases involving the question of the reservation of the sacrament, the arguments in which had been heard in July, 1899. In two of the cases the Archbishop of Canterbury was the principal and the Archbishop of York the assessor, while the Archbishop of York was the principal in the third case. The question was defined by the Archbishop of Canterbury in rendering his opinion as being whether the clergy of the Church of England are at liberty to reserve a portion of the bread and wine that have been consecrated in their churches at the holy communion and administer it to those who are not present in the church at the time when the prayer of consecration has been said. The practice, which is commonly spoken of as reservation, takes three distinct forms. In the first place, it is sometimes the practice to treat sick persons who are not in the church, but are living close by, as if they were part of the congregation, and at the time of administration to the communicants generally to take the elements out of the church to them as well as to those who are actually present. It is claimed that this is not reservation at all, inasmuch as the administration goes on without interruption, and it can not be said that what is sent in this way is part of what remains after the service is over. The second form of the practice is, instead of consuming all that remains of the consecrated elements as the rubric directs, to keep a portion back and to administer this portion to people known to be sick at some later period of the day. This is acknowledged by all to be reservation, and the reserved elements are kept in the church until the time when they are taken to the sick. Third, the elements after consecration are sometimes reserved, not only to be used for those who are known to be sick at the time, but also for any case of sudden emergency which may occasion a demand for the sacrament in the course of the week. Now, the canon requires that every clergyman shall promise that in the administration of the sacraments he will use the form prescribed in the Prayer Book and none other, except so far as shall be otherwise ordered by lawful authority. On examining the Prayer Book, we do not find any single mention of or allusion to the practice of reservation except in the close of the twenty-eighth article, where it is said the Sacrament of the Lord's Supper was not by Christ's ordinance reserved, carried about, lifted up, or worshiped. It will obviously require overwhelming evidence to prove that reservation in any sense whatever is part of the form prescribed in the Book of Common Prayer. Further, the language of the Thirty-nine Articles can not be taken otherwise than as condemning the practice altogether. All the four prohibitions must be taken together, and all of them in connection with the doctrine of transubstantiation emphatically repudiated just before. The reason for the prohibition is clear. These practices led to gross abuse which the Church of England felt

bound to stop; and even the administration from the church direct during the service is shown to come under the same head, for it gives an opening to the same abuse. Reservation is, moreover, not necessary. The Prayer Book appoints a shortened service of communion for the sick; and if this was still too long and entailed too much strain upon the mind, the administration to those who are too ill to understand fully what they are doing is certainly not to be desired under any circumstances. "The holy communion is not to be treated as if it worked like a magical charm, without co-operation on the part of the recipient. In conclusion, after weighing carefully all that has been put before us," the archbishop said, "I am obliged to decide that the Church of England does not at present allow reservation in any form, and that those who think it ought to be allowed, though perfectly justified in endeavoring to get the proper authorities to alter the law, are not justified in practicing reservation until the law has been altered."

The judgment of the Archbishop of York coincided with that of the Archbishop of Canterbury, he saying that he could come to no other decision than that "the practice of reservation has no sanction in the Church of England at the present time, that it was deliberately abandoned at the time of the Reformation, and that it is not lawful for any individual clergyman to resume such practice in ministering to the souls committed to his charge."

The opinion of the Archbishop of Canterbury embodied some observations respecting fasting communion. Pleas were cited to the effect that it was a hardship to be required to consecrate the sacrament in private houses, since this can not always be done in the early part of the day, and to continue their fast till later is sometimes a serious strain. The archbishop quoted the remarks of St. Chrysostom as fairly representing the general mind of the Church in his day, when fasting communion had become almost universal. That divine treated fasting as not having any virtue of its own, but as a means to the end of making true repentance and amendment of life easier, and admitted bodily weakness as a reasonable plea for omitting a fast. Without taking a full meal, such moderate partaking of food as will relieve any serious strain would be fully consistent with any obligation that the early Christians recognized. For to diminish the usual quantity of food is to fast, even though the diminution does not amount to a total abstinence.

Removal of Ornaments ordered.—In the case of the application of Mr. George Davey, a parishioner, for a faculty for the removal of illegal ornaments from the Church of the Annunciation, Brighton, Dr. Tristram, chancellor of the diocese of Chichester, in August, ordered the stations of the cross, confessional boxes and their adjuncts, holy water stoups, crucifixes, two "tabernacles" before which red lights were kept constantly burning, and images of the Good Shepherd, the Virgin Mary, and various saints removed within three months; failing which the petitioner would have authority to remove them himself.

A "Round-Table Conference."—In the London Diocesan Conference, in May, Prebendary Webb-Peploe moved a resolution to consider the desirability of appointing a "round table conference" in which all the parties in the ritualistic controversy might be represented and exchange and compare their views, the objects of the conference being, as defined in the resolution, to ascertain what agreement about principles exists, where difficulties begin, and what is their exact

nature. The resolution was prompted, the mover afterward explained, by special request and desire from those in authority; and in moving it he emphasized the fact that it was interrogatory and not affirmative, and spoke as with the conviction that the calling of a conference of the kind would be futile and absurd unless all the parties were bound by conditions of deference to the law as authoritatively declared. The motion was approved by the bishop and was supported by Lord Halifax. Afterward, in his president's address at the annual meeting of the English Church Union, June 21, Lord Halifax asked: "Is it possible for Christian men, realizing the effects of their divisions, not resolutely to determine to take any step which might hold out even the faintest hope of promoting union and peace? They could not sacrifice truth, but they could ascertain whether their differences were really as irreconcilable as they seemed. Prebendary Webb-Peploe had laid it down that such a conference could be held 'on the acceptance of God's Word and the formularies of the Book of Common Prayer of the Church of England in their plain meaning.' It was clear, therefore, that there was no question of a difference of first principles. On such a basis, with a careful definition of terms, a sufficient knowledge of theology and history on the part of those summoned to meet, and a charitable desire on the part of both sides to put the best possible construction on the explanations which might be offered, a great step might be taken in the direction of peace." But insistence on the acceptance of the judicial commission's decisions as an indispensable condition for entertaining the notion of a conference would make the conference impossible.

The Council of the Church Association, May 24, declared by resolution that it had read with feelings of profound regret the proposal to hold a "round table conference" with representatives of the Romanizing party in the Church of England. "They desire publicly and explicitly," the resolution continued, "to dissociate themselves from any recognition of the possibility of finding a *modus vivendi* with Romanism. They regret also that any suggestion, either of slackening activity of action or of making a definite appeal to Parliament, which is now being so prosperously initiated, should be even tolerated by professed friends of the Protestant cause. And they can not consent for a single moment to relax their own efforts in behalf of the Protestant principles of the Established Church which are being betrayed on a large scale by its own salaried servants."

The "Round-Table Conference" was held at Fulham Palace, Oct. 10 to 13, for the discussion of the subject of The Doctrine of the Holy Communion and its Expression in Ritual. It was attended by Prebendary Barlow, Prof. H. E. J. Bevan, Dr. Bigg, the Rev. N. Dimock, Canon Gore, Prof. Moule, Canon Newbolt, Dr. A. Robertson, Canon J. A. Robinson, Prof. Sanday, Prebendary Wace, Mr. W. J. Birkbeck, Viscount Halifax, the Earl of Stamford, and Chancellor P. V. Smith. Dr. Wace was elected chairman. The meeting was private. The report of the proceedings was to be submitted to the Bishop of London, and would then, it was announced, probably be published by authority.

Prayers for the Dead.—A prayer for the dead having been included in a form of intercession which had been issued for use with reference to the South African war, a number of protests were made to the archbishops against the authorization of such a service. To some of these objections the Archbishop of Canterbury said that it had been decided at law that prayers for the dead were

not forbidden in the Church of England, but had been sanctioned by the Court of Arches in 1858. At a public meeting in connection with the National Protestant Church Union held at the Church House, March 30, to consider this subject and that of the confessional, resolutions were adopted declaring the admission of a prayer for the dead in the form of an intercession on behalf of her Majesty's troops in South Africa to be "unscriptural and contrary to the express mind of the Church in her public worship," and deploring "the mischief caused by the circulation of manuals advertising auricular confession and its practice among many of the clergy of the Church of England as one of the worst revivals of mediævalism."

To a protest, by members of the National Protestant Church Union, presented by Prebendary Webb-Peploe, the archbishop replied, March 19, acknowledging that the prayer for the dead, not being found in the Prayer Book, could not be used by any clergyman without express authority, and could not be authorized by any bishop; but that the usual restraints did not apply to the form of prayer lately issued under the authority of her Majesty's Privy Council. "If it could be said that prayers for the dead, in whatever circumstances and whatever language expressed, are forbidden by the law of the Church of England, the order of the Council would certainly go beyond its powers, and ought not to have been made. But it is well known that this is not the case. The law has been clearly declared by the Court of Arches, and the question whether such a prayer should be used is not a question of law, but of expediency. On such a question different men will hold different opinions, and I regret that the opinion of the memorialists is different from mine."

"We know why prayers for the dead were discontinued and discouraged at the time of the Reformation. They were bound up in the minds of the people with the Romish doctrine of purgatory and pardons, and this doctrine had led to such scandalous abuses—e.g., the sale of indulgences—that the authorities were obliged to use very strong means in dealing with it. Prayers for the dead were therefore omitted altogether lest such prayers should keep alive the doctrine that had done so much mischief. And any prayers for the dead which implied this Romish doctrine have been and still are unquestionably unlawful."

"It would have been easy to forbid such prayers altogether by putting in the words 'prayers for the dead' before the word 'purgatory' in Article XXII, but this the Church stopped short of doing."

"I do not think it would be expedient to insert in the Prayer Book any prayer for the dead different in any way from the prayers already there. The constant use of such a prayer in the ordinary worship would, I think, be likely in course of time gradually to modify the teaching of the Church in ways that would not be wise."

"But this is a special and exceptional occasion. There are hundreds of sorrowing souls grieving over the sudden loss of friends and relations dearly loved. And the general emotion that thrills through the country adds to the keenness of their feelings. They have been praying for them daily, and pouring out their affection in their prayers. They know (it is common knowledge now) that prayers for the dead are not forbidden by the law of the Church of England. They ask whether some form of prayer can not be framed which will allow them to express their feelings."

"The objection that the blessed dead are so

happy that they can not receive any addition to their happiness can hardly be reconciled with the teaching of St. Paul. He tells the Thessalonians that on the last day, when the Lord Jesus will come again, God will bring with him those that sleep in Jesus. He tells them this to save them from sorrowing for the departed, and bids them comfort one another with these words. It is impossible to maintain that this does not imply that it will be a joy to us to be once more with them, and assuredly if so a joy to them to be once more with us. The whole spirit of this teaching is against the idea that the blessed dead are so happy that it is a matter of indifference to them whether we rejoin them or not. When we pray for reunion, our prayer is not for ourselves only, but for them also. And when any use the prayer of which you complain they pray that the departed in Christ Jesus may have what they certainly long for, and it is a comfort to many souls thus to express their confidence that those who have gone before them love them still."

"Moreover, the form is a national form. It is right that on such an occasion, when the whole of England is invited to unite in prayer to God for his blessing on the national action, provision should be made as far as possible for every variety of feeling that exists within the land of the national Church, and that there should not be even the appearance of a desire to narrow the breadth and comprehensiveness of her tolerance. Five different forms of Litany are included, and this prayer is only in one of them, and no clergyman is asked to use the prayer to which the memorialists object."

"In conclusion, let me observe that the broad toleration which is the marked characteristic of our courts of law is true to the essential spirit of Protestantism. A church which, resting on the Bible, makes it not only the right, but the duty, of every Christian to satisfy his conscience concerning what the Bible teaches could not possibly hold together if the largest toleration consistent with what the Church has ordered be not allowed to all who endeavor to exercise this right and discharge this duty to the best of their power."

Church Defense and Church Instruction.—The fourth annual meeting of the General Committee of Church Defense and Church Instruction was held at the Church House, March 30, the Archbishop of Canterbury presiding. The report stated that only 200 sermons had been preached and only 100 offertories taken out of a total of nearly 14,000 benefices, in response to requests made to every beneficed clergyman in the country. The income showed a slight diminution. Resolutions were passed declaring the need for continued effort "to complete the organization of Church defense and Church instruction by the appointment of a committee, or at least a secretary, in every parish to co-operate with the diocesan and decanal secretaries for the arrangement of lectures, the distribution of literature, and the collection of funds necessary for the support of the work"; urging the vital importance of disseminating an accurate knowledge among all classes of society of the history and work of the national Church; expressing regret that no provision had been made in the census bill for a census of religious profession; and advising greater effort on the part of Church people to promote a larger representation of members of the Church of England among district councilors and guardians, with a view to the appointment of Episcopal chaplains to workhouses.

The Church Congress.—The fortieth Church Congress met at Newcastle-upon-Tyne, Sept. 25.

The Bishop of Newcastle presided, and in his inaugural address reviewed the questions to be considered by the meeting. Upon the first of the subjects on the programme of discussions—Home Work: Review of the Church's Progress during the Nineteenth Century—generally and in the dioceses of Durham and Newcastle, the Bishop of Ripon spoke of what had been accomplished during the second half of the century, placing emphasis upon the deepening of the unseen hold of Christianity upon mankind and the enlargement of the scope of Christian aim which had taken place in the direction of Christian and social ethics. This was particularly illustrated in the work of the Salvation Army, the Church Army, and the Social Settlements. Canon Overton dwelt upon the "enormous effects" that were due directly or indirectly to the Church revival which began in 1833. Other topics of the first day's discussions were The Church's Policy in Elementary Education and The Cathedral System, with Reference to the Supply and Training of Candidates for Holy Orders. A number of carefully prepared papers were read upon the subject of The Reformation in England: (a) What was it in its Essence? (b) To what has it committed the Church of England? Respecting Old Testament Criticism and its Bearing on Teaching, Prof. Ryle held that inspiration was no special operation, but a spiritual informing force, and commended the teaching of the Old Testament as an evolution of religion. The Rev. Prof. Margoliouth urged that in teaching we should not look to results which were being fast discredited, but to those which the future was likely to see replaced and sustained. Other subjects on which papers were read were: Art: Its Relation to Religion; War: Attitude and Duties of the Church; The Church's Policy in Elementary Education; Autonomy of the Church: Mode of Achievement; The Ascension (at the devotional meeting); The Church's Progress in the Foreign Field in the Nineteenth Century: (a) In the Colonies, (b) In India, (c) In Other Mission Fields; The Housing of the Poor. The evening meeting for men was addressed by the Bishop of Newcastle, the Archbishop of Canterbury, the Bishop of Derry, and the Bishop of Thetford, all of whom pressed the claims of Christianity upon the reason and heart of man and its living power to elevate and ennoble him. At a Conference of Christians of various denominations in furtherance of Christian unity, held in connection with the congress, Earl Grey presided, and a resolution, moved by the Dean of Ripon and seconded by the Rev. F. W. MacDonald, President of the Wesleyan Conference, was adopted, declaring increased co-operation among Christians, where sacrifice of principle is not involved, to be both desirable and practicable.

Church of England in Australia and Tasmania.—The General Synod of the Church of England in Australia and Tasmania met in Sydney, Aug. 28. A committee was appointed to have charge of the raising of a twentieth century fund, and of provision for such objects as clergy pensions, religious education, clergy training, and Church extension. British New Guinea, already constituted a diocese, was included within the territorial limits of the synod. A proposal to change the name of the Church in such a way as to convey a closer identification of it with Australia was rejected. The synod decided that the primate should be selected from among the metropolitans of Australia and Tasmania, or until these provinces shall have been formed from among the occupants of the sees of Sydney, Melbourne, and Brisbane. Other action of the synod related to clergy discipline, thanks and public prayer for the

inauguration of the commonwealth, the abolition of the primate's veto on the confirmation of bishops, enlargement of the powers of the synod, the College of Theology, the Clergy Superannuation fund, the relation of the Church and industrial problems, and the Centenary Thanksgiving fund.

ARCHÆOLOGY. The results of the Oriental and Grecian archaeological discoveries of the season of 1899-1900 are among the most fruitful recorded in any single year. They have established the historical character of the first dynasty of Egypt and have brought to light some of its art, and of the art even of the pre-Menite period. They have proved the existence in Crete of Greek or Mycenaean writing eight hundred years earlier than any previously known and furnished palpable data concerning times and scenes which the Greeks invested with myths of fanciful character; and have brought to light in Babylonia a library of cuneiform cylinders, all antecedent to 2280 B. C., from the study of which an amount of information may be expected to accrue respecting the most remote past exceeding all present possibilities of estimation.

American.—The archaeological investigations conducted by Mr. Harlan I. Smith for the Jesup north Pacific exploring expedition on the north Pacific coast during 1899 were in continuation of researches made on the same field during the preceding two summers, and were designed, in the State of Washington, to extend existing knowledge of the distribution and character of cairns and burial mounds; to make reconnaissance of the shell heaps of Puget Sound and the western coast, with special reference to the determination of their character and the distribution of the southern limits of north Pacific coast culture in North America, and of any possible influence from the region of the lower Columbia; and to learn if the shell heaps of the lower Fraser river had any analogy with those of this area. In British Columbia a further investigation was desired of the cairns and shell heaps of northeastern Vancouver island. It was further necessary to study the archæology of the Lilloet valley with reference to possible communication of coast culture with the interior and *vice versa*. The southern limit of north Pacific coast culture and the southern limit of important influence from the Columbia valley seemed to coalesce in the region from Shoalwater Bay to Seattle.

Explorations carried on under the direction of the American Museum of Natural History among the relics of the Zapotecs in the state of Oajaca, Mexico, were to be continued during the winter of 1900-1901, under the superintendence of Prof. Marshall H. Saville. The Zapotecs are one of the hardiest of the native races of Mexico, exhibiting affinities with the Mayas in language and with the Nahuas in religion and some of the features of their architecture. Their ancient capital was Mitla, a city the ruins of which are extensive and important, and have received much attention from Americanists. The present work of exploration is directed to ruins in the vicinity of Cuilapa, Tectipac, and Maculixochitl, all of which are situated within a radius of 50 miles. The previous explorations made by Prof. Saville have left some curious problems to be solved. At a site known as the Mogotes de Xoxo royal tombs were found, seven of the mounds being arranged in a group, while others were detached. One is marked by a pyramid of the style common in Central America, 60 feet high, with a base 160 feet square. Within the mounds were cemented floors and ruins of walls of adobe. Vessels were found, some not ornamented, one bearing the figure of a large

clawed foot of a carnivorous animal. In one mound was a statuette of a man with a tiger's head. In another mound, where a cemented wall was discovered running along at a considerable depth under the ground, the workmen came upon a series of earthenware pipes, 36 feet in length, the smaller end of each section being cemented into the larger end of the preceding section, running apparently from the entrance of the tombs down toward the valley. As the situation affords little need for drainage, the possibility of finding some other motive for this construction—perhaps a mythological one—has been suggested. A more thorough examination of this work will be one of the objects of the present exploration. Pieces of similar pipes have been observed on Mount Alban and at two or three other points in Mexico, but nowhere before in place. Curiously shaped fu-

78 chapels which, according to Sahagun, surrounded the main temple have been discovered.

As much of the anthropological department of the American Museum of Natural History in New York as has been put in order was opened Oct. 29. It comprises at present five collections: the north Pacific collection, containing costumes, household implements, and ceremonial masks of the tribes of that region, the fruits of the Jesup expedition of 1897-1900; the Mexican collection, consisting of casts and specimens from the ruined cities and temples of Mexico and Central America; the South American gallery; the Indian gallery, in which is a very complete collection of the clothing and utensils of the Eskimos of the Arctic coast on both sides of the Pacific; and the collections made by missionaries in Japan and other Asiatic countries, which were shown at the Ecumenical Con-



STATUETTES IN TERRA COTTA, BEFORE A ZAPOTECO TOMB.

nereal urns were found in different situations. Of one group of five such urns, the central figure embodied a portrait of a man, while those to the right and left of it wore grotesque masks. Other tombs contained human relics and fragments of domestic pottery. Among the objects that have been found in different tombs are censers, like some that have been discovered at Oajaca, and a terra-cotta statue measuring about 6 feet in length, which has been placed in the National Museum of Mexico. Additional value is given to the Zapotecan collection of the American Museum by the fact that the history of every article in it is known, the place where it was found, the name of the finder, and the circumstances of the discovery being all recorded.

In the course of excavations for public works in the city of Mexico numerous Aztec relics, images, censers, implements, and other objects, have been recovered from the site of the ancient temple of Huitzilopochtli, the god of war. Two of the

ference of Missions in 1899 and afterward presented to the museum. The museum has several exploring parties at work, which are maintained by private contributions. Their fields during the last year were Peru, the western Indians, the Eskimos, and the whole region of the north Pacific. Explorations have been begun and are to be continued in the neighborhood of New York city, where some sites of former Indian villages are supposed to exist.

Recent explorations among the ruins of the cliff dwellers by Dr. George I. Cole, of the University of Southern California, included an examination of the structure called the castle of Montezuma on Beaver creek, Arizona, which, although a very large ruin, yielded few antiquities; and the region of Mesa Verde, a mountain district of considerable extent. The numerous side cañons along the Maricopa river, in which very ancient ruins were found, were fortified at their openings by large watch towers. The cities were built on the sides of sheer

precipices, the entrances to many of the dwellings being 700 feet above the river, and accessible only by climbing up from the bottom or down from the top. One building in this region had 1,500 rooms, and another, a pyramidal structure, was 3 stories high, with 500 rooms on the ground floor. Many skeletons, representing different Indian races, were recovered.

The Archæological Institute of America has for several years sustained an archæological school at Athens, which has accomplished much that is valuable in the exploration of Grecian sites. The new school at Rome had in 1899-1900 a year of successful work with American and Italian teachers. A school of Oriental studies in Palestine was to open in October, 1900.

An expedition is in course of organization under the direction of President William R. Harper, of the University of Chicago, Bishops Potter and Hurst, and others, to explore the ruins of Ur of the Chaldees, the city of Abraham. The site was visited by Mr. Tayler, an English consul, in 1854, who made sufficient excavations to reveal the wall of an ancient temple which was described as being an unusually perfect specimen of Babylonian architecture. In some of the graves Mr. Taylor found inscribed tablets, pottery, and ornaments of gold, silver, and precious stones. Ancient inscriptions uncovered by Arabs quarrying bricks from the mounds are to be found lying on the surface of the ground. From the importance of Ur in very ancient times, the excavations are expected to afford results of great value.

British.—Closing his presidential address before the anthropological section of the British Association on *The Early Ethnology of the British Isles* as studied from the sides of language and folklore, Prof. John Rhys summarized his conclusions by saying that "the first race we have found in possession of the British Isles consisted of a small, swarthy population of mound dwellers, of an unwarlike disposition, much given to magic and wizardry and, perhaps, of Lappish affinities; its attributes have been exaggerated or otherwise distorted in the evolution of the little people of our fairy tales. The next race consisted of a taller, blonder people, with blue eyes, who tattooed themselves and fought battles. These tattooed or Pictish people made the mound folk their slaves, and in the long run their language may be supposed to have been modified by habits of speech introduced by those slaves of theirs from their own idiom. The affinities of those Picts may be called Libyan, and possibly Iberian. Next came the Celts in two great waves of immigration, the first of which may have arrived as early as the seventh century before our era, and consisted of the real ancestors of some of our Goidels of the Milesian stock and the linguistic ancestors of all the peoples who have spoken Goidelic. That language may be defined as Celtican so modified by the idioms of the population which the earlier Celts found in possession that its syntax is no longer Aryan. Then, about the third century B. C., came from Begica the linguistic ancestors of the peoples who have spoken Brythonic, but in the majority of cases connected with modern Brythonic they are to be regarded as Goidels who adopted Brythonic speech, and in so doing brought down into that language their Goidelic idioms, with the result that the syntax of insular Brythonic is no less non-Aryan than that of Goidelic, as may be readily seen by comparing the thoroughly Aryan structure of the few sentences of old Gaulish extant."

The author had proceeded in his study on the principle that each successive band of conquerors had its race, language, and institutions eventually

more or less modified by contact with those whom it had conquered, and he had endeavored to substitute for the supernatural beings of Celtic legend a possible series of peoples. These views await confirmation by archæology.

The excavations at Silchester, prosecuted from July 20 to the end of August, 1899, consisted very largely in the exploration of the granary, where the marks of destruction by fire and the fall of the floor and roof into the vault of the hypocaust were very evident. On a paved floor between two walls of an adjoining building, supposed to be the prætorium, were found three coins—including a second brass of the second century and a third brass of the third. Between two other walls was a piece of solid masonry, somewhat resembling a doorway. At another point a small turret was found, which proved to be a guard chamber of the westerly gateway. Among the smaller objects turned out were a first brass coin of Antoninus Pius and a third brass of Constantine the Great, a somewhat delicate pair of tweezers with a ring clip, a bone bodkin, a pin, several pieces of stamped and ornamental pottery, and a broken pillar, about 9 inches high, bearing six letters of a former inscription.

Roman.—At the time of the suspension of the excavations of the Basilica Æmilia, in the winter of 1899-1900, although the section laid bare was less than half of the total area, yet, according to Prof. Rodolfo Lanciani, by reason of the symmetry of the lines, a sufficient knowledge of the general plan and elevation of the structure had been gained. The building comprised three parts: a central hall, divided into nave and aisles by a double line of columns; two rows of cells or tabernæ on either side of the central hall, opening on the outside porticoes; and these porticoes, which decorated the longitudinal side of the building—the side facing the forum, the only one as yet brought to light. The decoration of the front, on the side of the argiletum, and of the back, on the side of Faustina's Temple, has not been made clear. The basilica, or central hall, resembles in design that of Trajan, except that it has only two aisles instead of four. The line of separation between the aisles and the nave was marked by a row of columns, of which hardly any sign is left. The wall runs plain and flat, without any pilasters corresponding to the columns. The pavement of both aisles and nave is in a good state of preservation. It is composed of large slabs of giallo, portasanta, africano, cipollino, etc., all rectilinear and arranged so as to harmonize in design with the site of the columns. This pavement was found covered with loose copper coins of the end of the fifth or beginning of the sixth century, which with other rubbish bore marks of the action of fire. The central hall had an upper story or colonnade—a kind of structure which, according to Vitruvius, was set aside for the women of the audience. The Corinthian capitals are very graceful and skillfully executed. "In fact," says Prof. Lanciani, "every particle of the architectural decoration of this building is absolutely perfect." A commemorative inscription was engraved on the frieze of the lower order, of which only two fragments have been recovered. The Basilica Æmilia, originally constructed B. C. 179, underwent five restorations, the last under Tiberius, from whose time the fragments discovered date.

Among the epigraphic discoveries described by Prof. Rodolfo Lanciani as having been made in the excavations of the Basilica Æmilia is a fragment of the *Fasti Consulares*, which before its mutilation contained the list of the military tribunes from A. U. C. 374 to 378 and the list of consuls

from 422 to 433. The block of marble on which the lists were inscribed had been taken from the walls of the Regia many hundred years ago and turned into a threshold at the entrance door of a public office lodged among the ruins of the basilica. About four fifths of the inscriptions had been worn away, so that only the names of the tribunes for the year 374 and of the consuls for the years 422-424 were left. "To value rightly the importance of these records," says Prof. Lanciani, "we must remember that the mention of the Tribuni Militum for 374 is to be found only in Diodorus, xv, 50, and Livy, vi, 27, both being incorrect as regards the number and the names of those officers. Diodorus mentions only seven, Livy six; the newly found Fasti nine, with names and genealogy in full, ending with the record that toward the end of the same year, on the approach of the Prænestinian army to the walls of the city, T. Quintius Cincinnatus Capitolinus was elected *dictator rei gerundæ causâ*, and that he chose as the head of his staff Aulus Sempronius Atratinus." The column of consular names begins with that of Spurius Postumius Albinus, A. V. C. 422, and ends with that of Lucius Plautus Vennon, consul with Lucius Papirius in 424. Record is made between them of the dictatorship of Cneus Quintius Capitolinus *clari Agendî causâ*—or for the ceremony of driving a nail on Sept. 13 on the right side of the cella of Jupiter Optimus Maximus on the Capitol. This custom, which was a very old one, was derived from the Etruscans, who used it to keep account of the years. But in process of time the ceremony came to be performed only in extraordinary circumstances—in this case on account of a terrible mortality among the patrician families.

Grecian.—The latest publication by the Hellenic Society is the Plans and Drawings of Athenian Buildings, a part of the work upon the topography of Athens begun by the late Dr. Middleton shortly before his death, with a view to producing a book similar to his work on ancient Rome. The sketches made by the author have been revised on the spot by Mr. T. D. Atkinson, architect. During the year 1901 the society hopes to issue the record of the excavations carried out by the members of the British school at Athens upon the site of Phylakopi, in the island of Melos. These excavations have revealed the existence of a primitive city comparable to the ruins of Tiryns and Hissarlik. A successful beginning of excavations in the island of Crete has been made by Mr. Hogarth, director of the British school, and the discoveries made by him in the Dictæan cave and by Mr. Arthur Evans, of the Cretan Exploration Fund, on the site of Cnossus, are mentioned in the report of the society as being of such a character as to promise a rich harvest in the future.

The explorations at Corinth were continued under the auspices of the American investigators. In the excavations on the west side of the Propylæa numerous architrave blocks and parts of statues were met with. Two figures, 8 feet high, wearing the Phrygian cap, were found attached to pilasters at the back, to the tops of which Corinthian square capitals were attached. The tops of the heads of the statues were cut away, so that they might come closer up against the capital, which was also cut away a little. The figures thus appeared to assist in bearing the architrave, and were analogous to the caryatides. The bases of these statues were also found. Two other large, fine female heads were discovered, evidently belonging to the same series. No foundations were found to fit these and other pieces of superstructure, and they were therefore sup-

posed to have come from the Propylæa, of which massive buttresses remain. About 75 feet southwest of the west end of the Propylæa was a platform with a façade which extended beyond it as a balustrade. Digging from here, about 25 feet from the surface which they had broken the explorers came upon the floor of an irregular quadrangular room. In the west wall of this room were two lions' heads of bronze with wide-open mouths, as if for the flow of water. Beneath these heads were the round holes in the pavement in which pitchers were placed for filling. Above them the edge of the native ledge projected forward. This was an ancient Greek fountain, remaining absolutely intact, the only example of the kind known, for the other fountains that have been discovered had been changed in some way. But although it is certain that this fountain is Greek, the balustrade at the top of the steps leading to it is Roman, and made from the temples which Mummius destroyed. Pausanias mentions a single fountain situated in the Agora, on which stood a bronze statue of Poseidon with a dolphin at his feet ejecting water from its mouth. A base was found on the platform, which may have been connected with this statue.

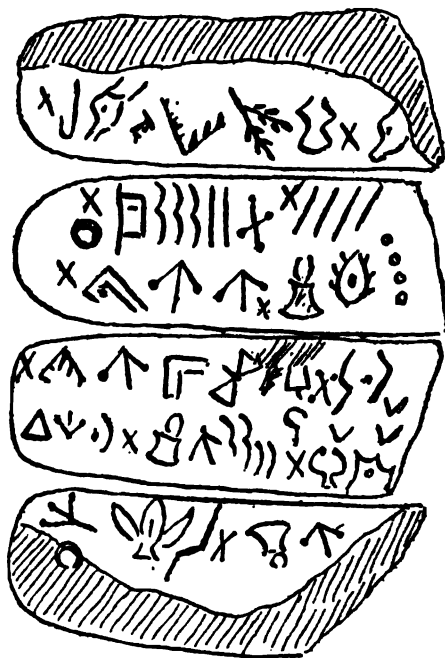
In a summary of the results of the excavation of the Argive Heræum issued in advance of the official publication Dr. Waldstein, agreeing apparently with Dr. Dörpfeld, assigns the remains of the earliest Greek civilization yet found to the third millennium B. C. A continuous indigenous development from that period is shown in buildings, pottery, and other features, for the study of which the Heræum, a religious center from the most remote period of the Argive territory, affords excellent facilities. The earliest constructions found on the site date, according to Dr. Waldstein, from the nineteenth century B. C., a dating which corresponds with the old Greek tradition of the number of generations of kings who ruled in Argos, and goes about four hundred years back of the Mycænæan age.

The final report by Prof. Dörpfeld of the latest excavations at Hissarlik was announced for publication during the winter of 1900-1901. Besides Prof. Dörpfeld's own contributions respecting the positions of the several buried cities, the work contains accounts of the archaeological researches of his collaborators, Winnefeld, Schmidt, Brückner, Gütze, and Wiberg, concerning the earlier and later finds.

Cretan.—Archæological interest has been directed to Crete since about 1881, when Mr. W. J. Stillmann reported the discovery of the remains of a wall at Cnossus, fragments of Mycænæan pottery, and curious signs upon stone blocks on the hill of Cephalâ, near Candia. He desired to excavate there, but was not permitted by the authorities to do so. Dr. Schliemann also tried to secure the right to explore the site, but could not come to terms with the Turkish officers. In 1894 Mr. Arthur J. Evans announced that he had discovered the existence in this island of a system of writing long anterior to that of historic Greece, and at the same time distinct from the Phœnician and from the Hittite script of Anatolia. The writings were found on seal stones bearing groups of pictographs and characters in the linear style. Researches continued since then have added to the data, and have culminated in the discovery in the Dictæan cave of Zeus of part of a steatite libation table of Mycænæan date, consisting of nine similar characters cut in the monumental style. Characters in the linear style were also found at Cnossus in 1894 and afterward. In 1896 Mr. Evans acquired an undivided interest in the hill at

Cephala to which Mr. Stillmann had directed attention, but was still not able to excavate. Finally, after a succession of difficulties, including a lawsuit, a forced sale of the property, and other complications, Mr. Evans became sole owner of the site and began excavations early in 1900. A building was revealed, which there seemed every reason to believe was a palace of the Mycenaean kings. Nothing was found that could be regarded as later than the fourteenth century B. C. The structure appeared to be of unsurpassed magnitude and magnificence, with fresco paintings and stone carvings of which the author declared, in the first letter announcing his discovery, "the remains excelled anything of the time yet found in Greece," the royal bathroom displaying a luxury not found in Mycenæ itself. Of even greater interest than this palace were the clay tablets bearing the characters which had already attracted attention. They were in shape generally more elongated than the cuneiform tablets of Babylon, but otherwise analogous to them, except that the records they bore were in Mycenaean script. These tablets were oblong slips of hand-molded clay, flat on the engraved side, with almost adzelike ends, but thickening toward the center of the back, and of lengths varying from about 2 inches to 7 inches, and in breadth from half an inch to 3 inches. Lines were ruled at intervals for the convenience of the scribes, one of the largest of the tablets showing 18 such lines—a certain proportion of them left blank. The most usual type consisted of two lines, or even a single line, of inscription, written from left to right lengthwise along the tablet, but some of the broader tablets had the lines arranged across the narrower diameter. The majority of the tablets were broken in consequence of a great conflagration they had passed through, but it may be possible to reconstitute some of them. The tablets had been deposited in several chambers and corridors. Some of them were in a clay chest shaped like a bath, some in wooden coffers, the remains of some of which have come to light, with the bronze hinges, and even the clay seals with which they were secured, still bearing impressions of Mycenaean gems. Fresh material of this sort was accumulating daily. Some of the signs in the inscriptions are identical with later forms, others suggest forms of the Cypriote syllabary, as well as Lycian and Carian characters; others are ideographic, and others are "unquestionably numerals." Some of the tablets have indorsements and additional inscriptions on the back. "These palace archives of Cnossus," says Mr. Evans, "not only prove to demonstration that a system of writing existed on the soil of Greece at least centuries before the introduction of the Phœnician alphabet, but they show that already at that remote date this indigenous system had attained a most elaborate development. These inscriptions are the work of practiced scribes, following conventional methods and arrangements which point to long traditional usage. Yet this development has been arrived at on independent lines; it is neither Babylonian nor Egyptian, neither Hittite nor Phœnician; it is the work on Cretan soil of an Ægean people. It is the fitting product of a country to which all later Greek tradition looked back as having supplied the earliest model of civilized legislation. There is, indeed, an air of legal nicety about these documents themselves the effect of which is enhanced by an interesting particular as to the method by which they were originally secured. It was not thought sufficient for the official concerned with their safe-keeping simply to impress with his signet gem the clay seals that made sure the coffers containing the tablets

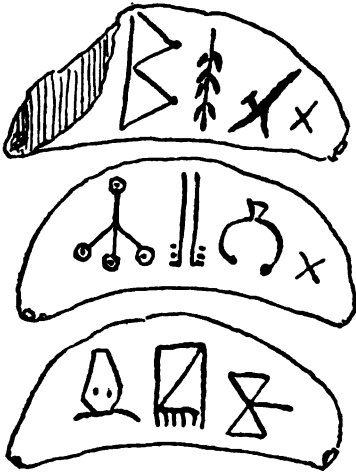
while the clay was still moist, but the impression of the intaglio itself and the back of the seal were in several cases signed and countersigned with incised characters in the same Mycenaean script." These inscriptions were written in a linear and highly developed script, with only occasional resort to more pictorial forms, while the previous studies of the seal stones had made it clear that there had existed in the island, from a very remote period, another form of writing, of a pictographic kind, and in its general aspect recalling Egyptian hieroglyphics, but in which "the methodical recurrence of groups of signs in the same collection sufficiently showed that one had here to do with a kind of writing and not with a mere aimless parody of Egyptian or Hittite forms." On further excavation a deposit of clay tablets was found of different forms from those exhibiting the linear script, and inscribed with a hieroglyphic type of writing identical with that of the prism seals. These tablets were of a variety of shapes. Together with the pictographic, they contained a proportion of signs as purely linear as any of the other category; and it was remarked that the written forms assumed in many cases a much more alphabetic character than their glyptic equivalents as seen on the seal stones, showing "a distinct step in the evolution of writing out of mere pictorial signs." Two examples of this sort are illustrated in the accompanying figures, the first of which is taken from a four-sided bar and the second from a three-sided crescent "label." For reasons which he sets forth, Mr. Evans believes that these pictograph characters and those upon the seal stones were the work of the Eteocretan stock, or the race which preceded the Mycenaean.



PICTOGRAPHIC AND LINEAR SIGNS ON A FOUR-SIDED BAR, CNOSSUS, CRETE.

The pictorial illustrations, Mr. Evans adds, which not infrequently accompanied the linear inscriptions enabled him in many cases to learn the purport of the clay documents. They thus were seen to refer to the royal stores and arsenals, and showed a decimal system of numbers akin to the

Egyptian. Mr. Evans hence infers that the particular chamber of the palace in which the tablets bearing pictographs were discovered contained rec-



PICTOGRAPHIC AND LINEAR SIGNS ON A THREE-SIDED CRESCENT "LABEL," CNOSSUS, CRETE.

ords of tribute or other matters from districts which probably stood in a subject relation to the city of Minos.

The building in which the excavations were made is described by Mr. Evans as being of vast extent, before which the palaces of Mycenæ, Tiryns, and other similar structures shrink into comparative insignificance. The entrance is approached from a paved court on the eastern side, and, flanked by two columns, leads into a large antechamber furnished with stone benches. Hence the visitor passes into an apartment which has been given the name of "the council chamber of Minos." Against the wall on the right stands a throne of gypsum, having a low seat and a tall, curiously carved back, which still shows traces of painting. Along the walls on either side are continuous stone benches; on the opposite side, protected by a high parapet to which seats are also attached, is an oblong rectangular depression, constructed with finely compacted slabs and evidently intended to contain water, but without visible outlet. It is approached by descending steps. The walls of the council chamber are ornamented with frescoes, still sufficiently preserved to enable landscapes, flowing water, and flowering plants to be distinguished. On either side of a door leading into a smaller apartment are two griffins, seated on baskets and apparently engaged in hatching. In another part of the building is a long corridor, on each side of which are a series of frescoes representing male and female figures arrayed in rich costumes, of most of which only the lower parts of the bodies have been preserved; but one piece, which had fallen, showed the figures of two men to above the waist, draped in long flowing mantles. On the left side, the central figure is a lady distinguished from the rest by her wide flounces. In another room were found parts of a fresco in a new miniature style, showing groups of elaborately dressed young women, seated and engaged in animated conversation. A figure that has attracted especial notice is that of a youth putting crocusi-like flowers in an ornamental vase.

The royal magazines or storerooms are approached by a long corridor which leads to a succession of 12 apartments. Some of these contained

rows of oil vases 5 feet high, some highly ornate and furnished with numerous small handles. Beneath the floor of several of the chambers and passages are receptacles of closely fitted stonework, one above the other.

Mr. W. J. Stillmann suggested in 1881 that this building, of which a wall of Cyclopean masonry was the only vestige then visible, was probably the Labyrinth. This view is confirmed not only by some of the features of arrangements, but also by the numerous figures of the double axe, *labrys*, recurring often in different parts. The figure corresponds to one of the epithets of Zeus, and is found in both the linear and the pictographic inscriptions as a significant character. The remains of the life-size figure of a bull of painted *gesso duro*, of which the head is perfect, discovered in the later days of the work of excavation, suggest an allusion to the bull of Europa, or to the one associated with the name of Pasiphaë, whose progeny, the Minotaur, dwelt in the Labyrinth.

The sculpture and painting in this palace are characterized by Mr. Evans as of a higher level than those at Mycenæ or Tiryns. "For monuments of the Mycenaean painting, indeed, the palace of Cnossus stands almost alone. On many of the walls the frescoes are found still adhering, almost as brilliant as when they were executed, and we have here a new revelation of ancient painting. Quite new in ancient art are certain miniature groups of ladies fashionably dressed in somewhat *décolleté* attire, seated in animated conversation, apparently in the courts and balconies of the palace itself." In the decorative designs and the fabulous animals—griffins and sphinxes—the influence of Egyptian models of the eighteenth dynasty is evident, but these foreign elements are adapted in an independent manner. Of more special interest are processions of youths bearing various vases, which Mr. Evans regards as having a singular general resemblance to the procession of the tribute-bearing Keft chieftains on the tomb of Rekmara at Thebes, which dates from the first half of the fifteenth century B. C. The Kefts of the Egyptian monuments are accepted as representing the Mycenaean race of the Ægean isles and coast lands. "On the Cnossian wall painting we see them in their home." The upper part of one of these Cnossian figures is of the highest anthropological interest as presenting for the first time a careful naturalistic portrait of a Mycenaean man. The profile is of a pure European character, almost classically Greek. The type of head represented is essentially that of the race which through all the changes of Cretan history still remains predominant in the island.

A new and striking piece of evidence of intercourse between Crete and the Egyptian middle kingdom was found in the palace in the form of a diorite figure with hieroglyphic inscriptions. Its good style and material have been recognized by Egyptologists as indicating a work of the twelfth, or at most of the thirteenth, dynasty. "In other words, the latest date to which it can be safely referred hardly comes down to 2000 B. C. We have here, therefore, a valuable indication for the approximate chronology of the earlier elements of the palace of Cnossus itself, which in any case go back of the period to which the remains of Mycenæ have given a name."

Mr. Evans, in order to avoid confusion of periods, purposely did not go below the Mycenaean deposits; but Mr. D. C. Hogarth, digging at another spot, found a whole series of early painted pottery, many of the pieces showing artistic designs of lilies, tulips, and other flowers, with shapes in

some cases so graceful as never to have been surpassed in any age of Greece. This style of Cretan pottery, which has received the name of Kamaraes from the grotto where its first occurrence was described by Mr. J. L. Myers, has been found by Mr. Petrie at Kahun, in Egypt, again in a twelfth dynasty connection. The intercourse between Crete and the Nile valley in the third millennium B. C. has thus left its traces on both shores of the Libyan Sea. Such data "give additional interest to the fact that the palace of Knossos, in its turn, overlies a vast neolithic settlement." Trial shafts were sent down by Mr. Evans through 14 feet of continuous stone-age deposits.

The great bulk of the remains explored at Knossos were contemporary with the eighteenth and nineteenth Egyptian dynasties.

In describing his discoveries in the British Association, Mr. Evans said that they not only carried back the existence of written documents on Greek soil about eight centuries before the first known monument of Greek writing and five before the earliest Phœnician, as exhibited in the Moabite stone, but they afforded a wholly new point of view for investigating the origin of the alphabet. The letter forms borrowed by the Greeks from the Phœnicians seemed to have been even influenced by these pre-existing Ægean scripts. The common elements existing in the Phœnician alphabet itself were very noteworthy. De Rougé's theory of the derivation of the Phœnician letters from remote hieratic Egyptian prototypes must be definitely abandoned. The Phœnician, and with it the Greek, alphabet must be regarded as a selection from a syllabary belonging to the same Ægean group as the Cretan. Such a phenomenon on the Syrian coast was naturally accounted for by the settlement there in Mycænæan times of the Ægean island race, the Philistines, whose name survived in that of Palestine. Though later Semitized, their biblical names of Kaphtorim and Cherethim or Cretans, sufficiently recorded their Ægean origin.

An exploration of the cave of Psychro in the Lasithi district of Crete, made by Mr. D. G. Hogarth, confirmed the view that it was the Lyttian grotto connected with the story of the infancy of Zeus in the legend, the earliest version of which was preserved by Hesiod. The cave was double. A shallow grotto on the north had a rude altar in the center, surrounded by many strata of ashes, pottery, etc., among which many votive objects in bronze, terra cotta, iron, and bone were found, together with libation tables in stone, and an immense number of earthenware cups used for depositing offerings. The lowest part of the upper grotto was inclosed by a wall partly of rude Cyclopean character and partly rock cut. Within the Temenos the untouched strata of deposit ranged from the early Mycænæan age to the geometric period of the ninth century B. C., or thereabout. In the southern or lower grotto, in the vertical chinks of the lowest stalactite pillars, there were found toy double axes, knife blades, needles, and other objects in bronze, placed there by dedicators as in niches; and also statuettes and engraved gems. The frequent occurrence of the double axe, both in bronze and molded or painted in pottery, found in the caves indicated that its patron god was the Carian Zeus of *Labyrinth* or the Labyrinth.

Babylonia.—The work of the expedition of the University of Pennsylvania at Nippur, under the direction of Prof. H. V. Hilprecht, has resulted in the discovery, in the ruins of the great temple of that city, of the ancient library which had been lost on the destruction of the temple by the Elamites, 2280 B. C. It is a remarkable fact in connection with this discovery that Prof. Hilprecht had pointed out eleven years before, when Dr. Peters was at the head of the expedition, that the remains of the library would be found at this very spot. The discovery has proved to be more important than had been anticipated. In the course of three months more than 17,000 tablets bearing cuneiform writing were recovered. They comprise historical, philological, and literary documents, mythological writings, works in grammar, lexicography, science, and mathematics. There is reason to believe, Prof. Hilprecht observed in giving an account of his discovery to the *London Daily News*, that these tablets "will for the first time enable the world to form an adequate idea of life in Babylon such as could only be possible by the discovery of a national library recording the national progress in literature, science, and thought generally. No document is found in this collection of a later date than 2280 B. C. As this date marks the invasion of the Elamites, the fact adds confirmatory evidence that the library was destroyed during this invasion." The unexplored remains of this library are represented as being even more extensive than those already examined. The tablets are generally arranged with regularity on clay shelves around the rooms, and Prof. Hilprecht estimates that at the present rate of working five years more will be required for the excavation and examination of the contents, and it is calculated that the unexplored part will yield 150,000 tablets to be added to those already discovered. Prof. Hilprecht, writing from Nippur, May 9, to the *Lutherisches Kirchenblatt*, described the 16,000 tablets taken from the eastern wing of the temple as being of the very greatest importance, "because for the most part they consist of religious, astronomical, linguistic, and didactic cuneiform texts, besides letters and other historical documents. From other parts of the extensive ruins we have taken out 5,000 other inscriptions, mostly referring to business transactions, so that the entire find of valuable cuneiform tablets amounts to over 23,000. In addition to this, I have to a large extent uncovered and determined the eastern fortifications, which reach back to the fifth thousand year B. C., together with the northeast gate of Nippur. One of the most important discoveries was the southern façade, over 600 feet in length, of a palace deeply buried in the earth belonging to the fourth thousand year B. C., and the complete uncovering of a large government building with a colonnade, belonging to the first thousand year B. C." The writer further speaks of having devoted special attention to the reconstruction of the temple of Bel at Nippur—"the greatest national sanctuary in the whole of ancient Babylon"—and of a great number of articles of art obtained, "ornaments of gold and silver, and other antiquities." The works of excavation mentioned in this letter include the continuation of the systematic exploration of the temple and the completion of the examination of the southern and eastern lines of the walls of fortification of the ancient city. "These walls show clearly the different epochs in which they were constructed. There are, first, portions of which the builders were the pre-Sargonic rulers. These are followed by the works of Sargon (3800 B. C.) and of Narum-Sin, his son; then about a thousand years later are the fortifications of Ur-Gur, to be followed by the later Cassite kings, belonging to the comparatively modern period of from 1700 to 1100 B. C. The numerous weapons found along the whole line of fortification, especially in the lower strata, were welcome material for determining the methods employed by besieging armies in the earliest periods of Babylonian history." A palace be-

longing to the pre-Sargonic period was uncovered beneath an accumulation of 70 feet of rubbish on the northeastern side of the Shate-el-Nil. This building, which is mentioned in the letter as having a frontage of 600 feet, is believed to have been the palace of the early priest-kings of Nippur. The few rooms excavated have already given valuable results in the shape of pre-Sargonic tablets, seal cylinders of the earliest type, and clay figurines of early date. At a later period in the history it was used as a quarry for materials for other buildings. Some of the discoveries correct previous conclusions reached by the Philadelphia expeditions. A large building with a remarkable colonnade, having been completely excavated, proves to be of a date a thousand years later than Dr. Peters had estimated it to be, and is a work of the Persian period. A cruciform structure which had been supposed to be connected with the temple turns out to have been a fortification constructed some time during the last two centuries B. C.

A catalogue of the collection of Assyrian and Babylonian tablets in the British Museum, prepared under the direction of Prof. Carl Bezold, of Heidelberg, includes principally the list of the 23,000 tablets that formed part of the library collected by Esarhaddon and Assurbanipal, 681-625 B. C., which have been recovered from the Koyunjik mound, Nineveh. The library, as appears from the records associated with it, was a careful selection, made by the order of the two kings named, of the more important works from the libraries of southern Chaldea, as a means of supplying the lack of literary culture felt by the Assyrian conquerors of the Babylonian empire. Assyrian youth might, indeed, resort to the libraries and temple schools of Babylonia, among which those of Borsippa, Sippara, and Nippur were conspicuous; but the influence under which they were brought there was all Babylonian, and not favorable to the aspirations of the Assyrian monarchs. In order to counteract this condition, Esarhaddon determined to form a library and school at Nineveh; and this work, begun by him, was completed by Assurbanipal. The library was named after the great library of E-Zida in Borsippa, and was dedicated to Nebo, the god of learning, and his consort Tamitum, the hearer or pupil. Many of the tablets bear a colophon, reading, "These tablets I wrote, engraved, and, for the inspection of my people, placed in my palace," which is interpreted as meaning that the library was a public one. The scribes engaged in preparing the tablets were instructed to copy all works of educational or literary value in the colleges of the south; and the fidelity with which the transcription was done is indicated by the indorsement "Like its old copy" on most of the books, and by the occasional occurrence of the statement that the original was damaged. The collection includes educational works and handbooks, medical tablets, astronomical and astrological texts, and letters and dispatches, and were written in the different scripts current in the empire, and one that is unknown. Many of the tablets are furnished with a legend corresponding in character with the modern bookplate, in which the royal proprietorship is asserted and a warning is embodied against carrying the book off or converting it to another person's use.

Renewed Excavations at Susa.—Soon after retiring from the museum at Cairo M. de Morgan was commissioned to continue, under the permission of the Shah, the excavation at Susa, in Persia, which had been begun several years ago and carried on with considerable success by M. Dieulafoy. He adopted the method of proceeding there that had been used, with satisfactory results, by Mr.

Petrie in Egypt and by Dr. Peters in Mesopotamia, of driving tunnels in the mounds reaching from the base to the summit. Beneath the charred remains of the Shushan of Arab times the excavators came upon the Elamite palace which was destroyed by Sardanapalus, and beneath this, in successive strata downward, the bricks of royal buildings and the flint implements of remote times. Among the more important of the ancient objects found was a limestone monument bearing a sculptured portrait of a bearded king wearing a flowing robe and armed with a bow and shaft.

Egyptian.—Excavations were carried on in Egypt during the winter of 1899-1900 under the auspices of six institutions at seven principal sites. A party working in behalf of the museum of Gizeh at Sakkarah, near the pyramid of Horæ, in search of burials of princes and princesses, came upon an unfinished burial of the Saitic period, the disposition of which casts light on the way in which the massive sarcophagi were erected. In a chamber reached by a narrow doorway from the bottom of a well 20 metres deep was a very large sarcophagus, not yet occupied, the lid of which was raised about 2 feet above its place by six little pillars of masonry. On the sides of the wall of the chamber were notes in demotic on the progress of the work, written in black ink by the overseer, and other examples of unfinished construction contributed to illustrate the method of proceeding.

The work of M. Gayet, representing the Musée Guimet at Shekh Aabadeh, the ancient Antinoë, has as yet brought to light nothing more important than some Coptic embroideries.

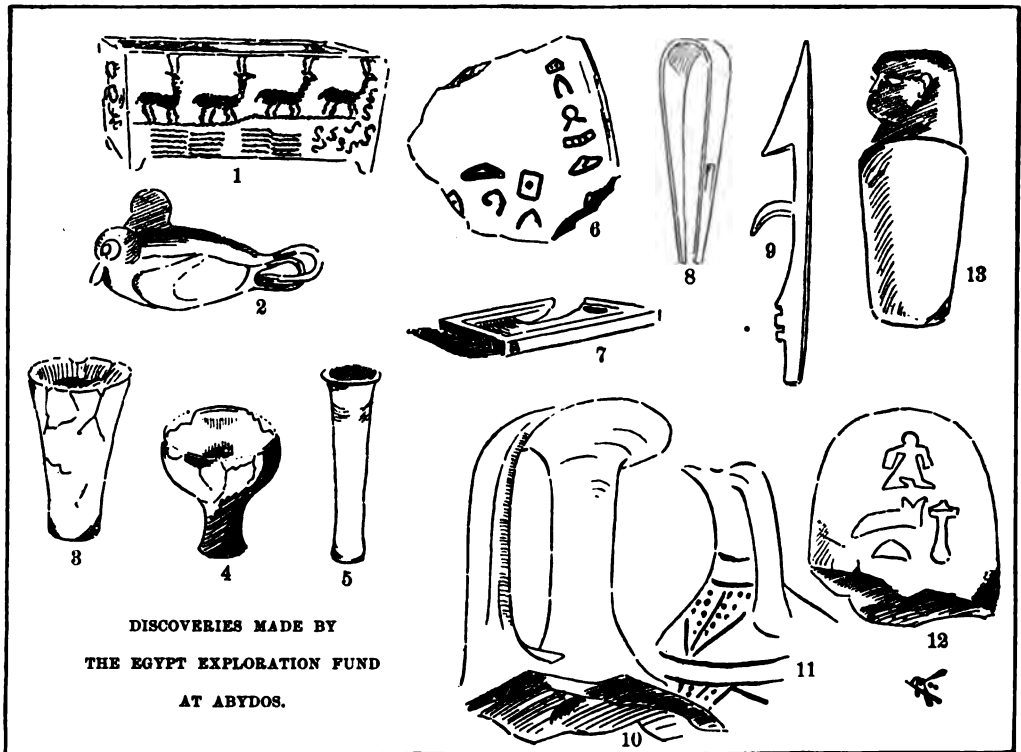
Mr. Garstang, working for the Egyptian Research Account in some tombs near Abydos, came upon several undisturbed burials of the twelfth and eighteenth dynasties, and some which it is hoped may belong to the period between these two ages of which little is yet known.

The University of California had two parties in the field, one of which, under Mr. Reisner, made an unsuccessful search at Kufi for the cemetery of Coptos. The other party was that of Messrs. Grenfell and Hunt, prosecuting at Ummel Barakât, on the southern edge of the Fayum, the fourth season of their searching for papyri. The ruins of a large town, hitherto wholly unknown, were discovered, the name of which appears to have been Tebtunis. The remains found indicate that this place flourished from Ptolemaic times down to those of the Arabs. Many papyri were found, largely from the houses of the priests in the temple inclosure, which date from the first to the third century of the Christian era. A very large cemetery, the earliest monuments of which date from the twelfth dynasty, was discovered. About 60 of the mummies found in the Ptolemaic cemetery were in good preservation. They were furnished with papyrus cartonnage like those found by Prof. Petrie at Gurob. Thousands of mummified crocodiles were found, some of them wrapped up in papyrus sheets and stuffed in the head and stomach with papyrus rolls, many of which are large and fine, although hardly supposed to contain important literary remains. All of them are of a late Ptolemaic date. The general result of the work of Messrs. Grenfell and Hunt is nearly to double the quantity of Ptolemaic papyri extant.

The work of Prof. Petrie and Mr. Mace at Abydos in the interest of the Egypt Exploration Fund was very successful, and contributed important additions to our verified knowledge of the most ancient Egyptian history. Explorations had already been carried on at this site by M. Amélineau, who had discovered the tombs of a number of the earlier kings and recovered a number of objects

illustrating the arts of that remote period. But his work has been criticised as lacking in system. Prof. Petrie, going over the ground again, applied the scientific processes and methods of identification and registry which were described in the Annual Cyclopædia for 1899. While M. Amélineau's researches left the exact date of the relics he found in doubt, with room for wide differences of opinion, those of Prof. Petrie resulted in the settlement of this question and in the collection of large quantities of material identified as of the first dynasty. While this first dynasty, Prof. Petrie said in giving an account of his discoveries at University College, Gower Street, London, had generally been looked upon as more or less mythical, we were now able to handle the royal drinking bowls from the palaces, to compare the art and

the Usafais, Miebis, and Semempsis, had been identified. Other royal tombs of the same group were those of other kings of the first dynasty. This discovery had also, by the style of the work and the position of the objects of King Aha, led to this king's being certainly identified with Menes, the founder of the Egyptian monarchy. Thus the tablet found by De Morgan in the tomb of Aha proved to have been correctly interpreted by Borchardt. We were now in a position to form a correct appreciation of the whole of the first dynasty between 4000 and 5000 B. C. The art, which was rude and archaic under Menes, rose to its best point under the luxurious King Deu-setui, the fifth of the dynasty. His tomb was paved with red granite and richly furnished with cups of crystal and beautiful stones, bearing his name in



DISCOVERIES MADE BY
THE EGYPT EXPLORATION FUND
AT ABYDOS.

OBJECTS RECOVERED FROM TOMBS OF THE FIRST DYNASTY AT ABYDOS, EGYPT. 1. Box of pottery, with figures of gazelles, a boat, and fishes (on the end); prehistoric. 2. Box for eye paint, in the form of two half ducks linked at the tails; carved from a single piece of ivory; first dynasty (beginning). 3, 4, 5. Stone jars; beginning of the first dynasty. 6. Piece of pottery marked with accounts of workmen; tomb of Zet Ateth, third king of the first dynasty. 7. Palette of slate, King Merneit Ata; first dynasty. 8. Copper tweezers; first dynasty. 9. Copper harpoon; first dynasty. 10, 11. Pieces of painted Ægean pottery; tomb of King Mersekha-Semenptah; first dynasty. 12. Stele erected on the grave of two dwarfs (king's servants), and bearing figures of dwarfs. 13. Canopic jar; about 2,500 B. C.

the carvings of the period, to criticise the posthumous respect paid to each king, and "to feel much more familiar with the daily life of the age than we could with our own Saxon kings. All this had come about through the careful study of three or four insignificant-looking lumps of black mud." The royal wine jars, of which many remains were found, were sealed by the officials, and bore generally only the hawk name or Ka name which, not being recorded in the lists of kings, was not sufficient for historical identification. But one or two seals of each king bore both his names, and from these the actual tombs of the fifth, sixth, and seventh kings of the first dynasty, named by Mane-

large, finely cut hieroglyphs, while no fewer than 20 tablets of ivory and ebony carved with inscriptions were known of from his tomb. The tombs of the later kings were less sumptuous, but a more general habit of inscribing the objects of the palace and the tomb seems to have prevailed among them. Among the principal classes of antiquities obtained during the winter, Prof. Petrie names: (1) The great tombstones of the kings, one of Merneit, a king previously unknown, and one of Qa, the last king of the dynasty; (2) the private tombstones of the royal domestics, of which 50 were obtained, one in particular giving all the official titles of a major-domo of this age; (3) the fine stone drink-

ing bowls and platters, portions of several hundred dishes of fine stone, together with numerous alabaster and slate dishes, about sixty of which bore royal inscriptions; (4) the impressions of seals on the closing of the wine jars, of which 88 different inscriptions were now drawn; (5) the labels and tablets of ivory and ebony, of which parts of 30 had been found with inscriptions; and (6) the innumerable pieces of carving in slate, ebony, ivory, and stones. A collection of these objects was exhibited at University College, London, early in July. Among them a group of *Ægean* pottery, of forms hitherto unknown, from the tomb of King Mersekha-Semenptah, was considered very remarkable. It appeared evidently of the same family as the Mycenaean pottery of later times. Prof. Petrie speaks of it as dated by the tomb to about 4500 B. C., and as giving the earliest fixed point yet known in the history of Greek civilization. Besides the articles belonging to the kings of the first dynasty were some appertaining to two pre-Menite kings, the extreme beauty of some of which—especially a carved hand—"seems to indicate that they were the products of the zenith of a long artistic history."

In a paper on the system of writing in ancient Egypt, read in the British Association, Mr. F. H. Griffith remarked that Egyptology was now reaching a position where it might contribute trustworthy information for the benefit of kindred researches. Egyptian writing consisted of ideographic and phonetic elements. The highest development shown was an alphabet, which, however, was never used independently of other signs. Apparently not acrophonic in origin, it represented consonants and semiconsonants only, vocalization not being recorded by Egyptian writing. Phonograms were derived from word signs. The end of the native system was brought about by the gradual adoption of the Greek character, beginning perhaps in the second century A. D. Although the Egyptian system of writing might not be actually a stage in the history of our alphabet, it threw a strong light on the development of the alphabetic system; and the survival of its pictorial form for decorative purposes enabled us to recognize the highly ramified connections between the forms and meanings of characters to an extent impossible at present in any other system, whether in Mesopotamia, China, or elsewhere. The results of recent Egyptian philology proved that Egyptian was originally a Semitic language, though its character changed early. The main lines of the grammar being at length established, the materials for a complete dictionary were now being collected and classified.

A papyrus assigned to the twelfth dynasty, which was discovered at Kaluen in 1898, contains data which are regarded by Prof. Borchard, of Cairo, as furnishing an important aid in fixing the date of that period, a point regarding which the extreme estimates differ to the extent of about twelve hundred years. The papyrus belongs apparently to a class of records of daily events kept by the priests in the temple. Among the items is a note respecting the first rising in the year of Sirius (or Sothis), at daybreak, as occurring on the 16th day of the eighth month of the seventh year of King Usertesen III, and embodying directions for the proper observance of the day. In another part of the papyrus is a record, dated on the 17th day of the month, the day following the festival, of the festival donations that were made "on the appearance of Sirius." Applying an astronomical method advocated by Oppolzer, Dr. Brix has computed that the phenomenon mentioned took place about 1873-76 B. C. This would

bring the date of the twelfth dynasty down to about eight hundred years later than the date accepted by Prof. Petrie.

ARGENTINE REPUBLIC, a federal republic in South America. The legislative power is vested in the Congress, consisting of a Senate of 30 members, 2 from each province and the federal district, and a House of Representatives, numbering 133, the ratio being fixed by the Constitution of 1898 at 1 to 33,000 inhabitants. Representatives are elected for four years, one half being renewed every second year; Senators for nine years, the provincial Legislatures and the electoral college of the capital electing every third year a third of the Senate. The President is chosen for a term of six years by an elective body chosen by the people. The President of the republic is Gen. Julio A. Roca, who entered upon his office on Oct. 12, 1898; the Vice-President is Dr. Norberto Quirno Costa. The Cabinet appointed by President Roca was composed as follows: Minister of the Interior, Dr. Felipe Yofre; Minister of Foreign Affairs and Worship, Dr. Amancio Alcorta; Minister of Finance, Dr. José M. Rosa; Minister of Justice, Dr. Oswaldo Magnasco; Minister of War, Gen. Luis Maria Campos; Minister of Marine, Commodore Martin Rivadavia; Minister of Agriculture, Dr. Martin Garcia Merou; Minister of Public Works, Dr. Emilio Civit.

Area and Population.—The area of the republic is 1,778,195 square miles. The population in 1899 was estimated at 4,569,000. Buenos Ayres, the chief city, had 779,872 inhabitants. The number of immigrants in 1898 was 95,190, of whom 39,135 were Italians, 18,716 Spaniards, 2,449 French, 1,503 Turks, 779 Germans, 632 British, and 31,976 from other countries.

Finances.—The revenue in 1898 was \$33,878,263 in gold and \$49,744,214 in paper; expenditure, \$20,931,551 in gold and \$93,072,745 in paper. The revenue for 1899 was estimated at \$41,870,867 in gold and \$69,822,000 in paper, and the expenditure at \$26,453,272 in gold and \$101,170,399 in paper. The budget estimate of revenue for 1900 was \$45,981,735 in gold, of which \$37,500,000 came from import and \$2,500,000 from export duties, and \$67,122,000 in paper, of which the spirit tax produces \$16,000,000; the tobacco tax, \$9,000,000; wine, sugar, and matches, \$7,800,000; beer and other taxes, \$2,681,000; sanitary works, \$5,100,000; land tax, \$2,900,000; stamps and licenses, \$9,310,000; posts and telegraphs, \$4,550,000; land sales and leases, \$4,000,000; railroads, \$3,209,000; national bank, \$2,000,000; various sources, \$572,000. The gold expenditure for 1900 was estimated at \$32,946,813, of which \$23,147,962 represent the service of the debt and \$9,515,250 extraordinary expenditure. The estimated expenditure in paper was \$95,447,513, of which the Ministry of the Interior and Congress required \$16,666,656; the Ministry of Foreign Affairs, \$1,097,520; the Ministry of Finance, \$7,115,420; the public debt, \$11,695,218; the Ministry of Justice, Education, and Worship, \$16,605,678; the Ministry of War, \$16,011,057; the Ministry of Marine, \$11,955,680; the Ministry of Agriculture, \$1,911,620; the Ministry of Public Works, \$6,302,664; extraordinary expenditures, \$6,086,000. At the opening of Congress on May 1, 1900, the expenditure for 1899 was stated to have been \$7,000,000 below the estimate, excluding special expenditure amounting to \$13,500,000. The receipts were \$45,676,000 in gold and \$61,420,000 in currency.

The national foreign loans in July, 1899, amounted to £45,123,408, in addition to which there were provincial, municipal, and railroad

debts to the amount of £20,021,138 guaranteed by the Federal Government and prospective new issues of £5,938,760, besides £9,868,015 of cedulas of the national mortgage bank, making the total foreign debt £80,951,321. The amount of the internal debts was \$104,595,933 payable in paper and \$40,375,877 in gold. The foreign and domestic debts on April 30, 1900, amounted to £88,000,000, besides £3,500,000 of floating debt.

The Army and Navy.—The standing army numbers 1,463 officers and 12,867 men. The National Guard, the members of which receive two months of camp drill, had 467,572 men on the rolls in 1898.

The navy consists of 2 old ironclads for coast defense, 2 of newer construction, 5 armored cruisers built in Italy, 2 ram cruisers built in England, 5 other modern cruisers and gunboats, 4 destroyers, and 12 first-class and 10 second-class torpedo boats.

Commerce and Production.—The production of wheat in 1899 was about 2,500,000 tons; of flaxseed, 3,000,000 tons; of sugar, 90,000 tons. Indian corn is, next to wheat, the most important crop. The number of cattle slaughtered in 1899 was 310,700. The wool clip was 225,000 tons. The total value in gold of the merchandise imports in 1898 was \$107,429,000; of exports, \$133,829,000. The imports of animal products were valued at \$2,175,000; alimentary substances, \$13,557,096; beverages, \$8,298,612; textile fabrics and clothing, \$33,046,484; mineral oils, \$3,206,021; chemicals, \$3,101,784; lumber and wood manufactures, \$816,994; paper, \$3,016,689; leather and hides, \$960,031; iron and iron manufactures, \$17,785,792; other metals, \$3,504,811; pottery and glass, \$8,599,408; miscellaneous, \$2,113,039. The exports of animals and animal products were valued at \$87,381,625; agricultural produce, \$42,692,922; forest products, \$2,283,061; mineral products, \$205,559; products of the chase, \$449,549; miscellaneous, \$816,742. The export of wool was 221,286 tons; of sheep skins, 42,245 tons; of wheat, 648,161 tons; of maize, 717,105 tons; of beef and mutton, 89,914 tons. The imports of gold and silver coin and bullion were \$7,303,255; exports, \$1,574,946.

The import and export trade was divided among various countries in 1898 as follows:

COUNTRIES.	Imports.	Exports.
Great Britain.....	\$39,012,600	\$19,305,928
France.....	10,596,725	29,981,056
Germany.....	12,571,116	20,286,388
Belgium.....	9,449,981	13,949,751
Italy.....	18,696,341	5,266,054
United States.....		
Brazil.....	5,012,115	7,916,301

The gold value of imports in 1899 was \$117,000,000; exports, \$185,000,000.

Navigation.—The number of vessels engaged in foreign commerce entered in 1898 was 10,198, of 6,555,128 tons, of which 6,866, of 5,928,765 tons, were steamers and 3,332, of 626,303 tons, were sailing vessels. The mercantile navy in 1898 numbered 86 steamers, of 31,976 tons, and 157 sailing vessels, of 39,695 tons.

Communications.—There were 9,885 miles of railroad in operation in 1898. The capital invested was \$510,643,296; receipts, \$33,063,653; expenses, \$19,117,118; number of passengers carried, 16,044,389; tons of freight, 9,001,559.

The telegraphs have a total length of 25,345 miles, with 59,060 miles of wire.

The number of letters received in the internal postal service in 1897 was 46,653,262; of other packets, 37,381,566; of letters dispatched, 47,862,283; of other packets, 35,737,266; of letters re-

ceived in the foreign service, 9,257,654; of other packets, 5,081,737; of letters dispatched, 6,444,378; of other packets, 2,088,718.

ARIZONA, a Territory of the United States, organized Feb. 14, 1863; area, 113,020 square miles. The population, according to each decennial census, was 9,658 in 1870; 40,440 in 1880; 59,620 in 1890; and 122,212 in 1900. Capital, Phoenix.

Government.—The following were the Territorial officers in 1900: Governor, N. O. Murphy; Secretary, Charles H. Akers; Treasurer, T. W. Pemberton; Auditor, G. W. Vickers; Attorney-General, C. F. Ainsworth; Adjutant General, H. F. Robinson; Superintendent of Education, R. L. Long; Geologist, W. P. Blake; Chairman of the Live Stock Sanitary Board, A. C. McQueen; Chief Justice of the Supreme Court, Webster Street; Associate Justices, Richard E. Sloan, Fletcher M. Doan, George R. Davis; Clerk, Lloyd Johnston—all Republicans.

Finances and Valuations.—The bonded Territorial debt, as by the last biennial report, was \$1,045,972.43; the city and county funded indebtedness was \$1,634,027.57. The valuation of taxable property was \$31,473,540. In August of this year the valuation after equalization amounted to \$33,782,466.

A decision lately rendered in the United States Supreme Court affirms the validity of railroad subsidy bonds given by Yavapai County years ago, but lately sought to be repudiated as illegal. The road brought a suit, not yet decided, but the validity of the bonds was in question in the suit between two counties, decided as above.

Education.—The new normal school at Flagstaff was dedicated May 11. Forty-one students were in attendance during the year.

The Territorial University has about 130 in the regular classes.

The Indian school at Phoenix has about 600 resident pupils and about 100 day scholars who are employed in families in the town. The Fort Yuma Indian school has about 150. A new building, to cost \$10,000, is in progress.

Railroads.—The total valuation of the railroads in the Territory that are subject to taxation, as reported by the Board of Equalization, is \$4,363,624. The Attorney-General advised the board that the Santa Fé, Prescott and Phoenix could not be placed upon the assessment roll, exemption having been made by the Legislature in consideration of the fulfillment of certain conditions. Most of the lines had extensions in progress this year, opening new mining territory.

Banks.—The abstract of the condition of the national banks of the Territory at the close of 1899 gave: Loans and discounts, \$1,364,118; stocks and securities, \$174,879; due from national banks not reserve agents, \$240,002; due from State banks and bankers, \$113,761; due from reserve agents, \$469,221; gold coin, \$134,720; total specie, \$158,158; lawful money reserve, \$232,415; due to other national banks, \$11,133; due to State banks and bankers, \$47,829; individual deposits, \$2,138,619.

The New Capitol.—This building was finished in August. It has cost \$130,000. Its length is 184 feet and its depth is 84 feet. The height of the top of the dome from the ground is 76 feet. The dome is 44 feet in diameter. The building is constructed as nearly as possible of Arizona material. The foundation is made of malpais, the walls of the first story of granite, and the rest of the walls of tufa. The structure is as nearly fireproof as it was possible to make it.

Cities.—The census returns credit the capital city with 5,544 inhabitants. The assessed valua-

tion is \$4,276,000. A very successful Indian and Cowboy Carnival was held last winter, with the design of attracting travelers to the Salt River valley and prolonging the winter tourist season.

The population of Tucson is somewhat more than 7,000 and the valuation between \$2,000,000 and \$3,000,000.

Globe was incorporated this year, and has in progress a gravity system of waterworks with a catchment reservoir 3 miles to the south.

Prescott suffered great loss by fire, July 13. A large part of its business portion was burned away, with the loss of one life and destruction of property amounting to more than \$1,000,000. There was slight protection against fire, the waterworks not having been finished; consequently, rates of insurance were high and not a large amount was carried. Offers of aid were sent from other places but were declined, and rebuilding was at once begun. An election was held Aug. 28 on a proposition to bond the town for \$100,000 for water and sewerage. Of 340 votes cast, 19 were opposed.

Products.—Newspaper reports indicate constantly increasing activity in mining, fresh discoveries, new strikes in old fields, more capital, improved machinery. The gold product for 1899 was estimated in Wells, Fargo & Co.'s report at \$3,000,000 and the silver at \$739,113; ores and base bullion were estimated at \$16,659,148. These figures are regarded by mining men as too low.

From a description that accompanied the exhibits of three Arizona companies at the Paris Exposition are taken the following general statistics: The present annual production of the Copper Queen mines is approximately 40,000,000 pounds of copper; of the Detroit mine, 16,000,000 pounds; of the United Globe mines, 6,000,000 pounds. The number of employees of the three groups of mines is 2,500. The coal consumed in generating power is 25,000 tons, and the coke used in the furnaces 60,000 tons. Both coal and coke come from the Colorado Fuel and Iron Company. The Copper Queen and Detroit companies have mercantile departments and stores at their mines. All three companies support free libraries and reading rooms for their employees. A medical staff and well-equipped hospitals exist at all the establishments, the men contributing monthly from their wages for medical and hospital services.

The discovery of oil fields near Yuma, near Phoenix, and between Prescott and Jerome is reported.

Onyx is quarried at Big Bug, 20 miles south of Prescott, and in the Cave Creek hills north of Phoenix. New discoveries have been made of deposits near Mayer. The finishing and polishing opens a field for Indian labor.

The Live Stock Inspection Law.—This law was in March practically declared invalid in the district court, as one of its main provisions was declared contrary to the organic act as restricting the business of the plaintiff in the suit.

Forest Protection.—An organization has been formed with a view to saving the forest reserves. After a careful investigation of the effect of stock, and particularly of sheep, upon the forest reserves, the commissioner of the General Land Office issued an order for the protection of the forests, excluding all stock from the reserves. Ever since then the large sheep owners in the northern part of the Territory have been endeavoring to have the order rescinded. Recently a bill was introduced "for the protection of the stock interests in the country," and this was the occasion of the action noted above.

Political.—The Republican Territorial Convention, Sept. 24, nominated Gov. N. O. Murphy as Delegate to Congress. There were two Democratic

candidates—J. F. Wilson and Marcus A. Smith—but Mr. Wilson withdrew about a month after the date of the convention.

In the contest for Delegate to Congress the total vote of the Territory was 16,620, compared with a total vote of 14,050 in 1896. Of this, Smith, the Democratic candidate, received 8,664; Murphy, Republican, 7,664; and Danielson, Prohibitionist, 292.

ARKANSAS, a Southern State, admitted to the Union June 15, 1836; area, 53,850 square miles. The population, according to each decennial census since admission, was 97,574 in 1840; 209,897 in 1850; 435,450 in 1860; 484,471 in 1870; 802,525 in 1880; 1,128,179 in 1890; and 1,311,564 in 1900. Capital, Little Rock.

Government.—The following were the State officers in 1900: Governor, Daniel W. Jones; Secretary of State, Alexander C. Hull; Treasurer, Thomas E. Little; Auditor, Clay Sloan; Attorney-General, Jefferson Davis; Superintendent of Education, J. J. Doyne; Commissioner of Mines, Manufactures, and Agriculture, Frank Hill; Railroad Commissioners, J. G. Wallace, Felix M. Hanley, and Henry W. Wells; Mine Inspector, Robert Boyd, succeeded in September by W. H. Hill; Land Commissioner, J. W. Colquitt; Inspector of Wines, Carl A. Starck; Board of Charities, S. H. Davidson, T. H. Matthews, J. J. Thomas, J. W. Meeks, G. L. Basham, W. A. Jeffers; Chief Justice of the Supreme Court, Henry G. Bunn; Associate Justices, Simon P. Hughes, C. D. Wood, Burrill B. Battle, James E. Riddick; Clerk, P. D. English—all Democrats.

Population.—The census returns by counties for 1900 and for 1890 are as follow:

COUNTIES.	1900.	1890.	COUNTIES.	1900.	1890.
Arkansas	12,973	11,492	Lee	19,409	18,886
Ashley	19,734	18,295	Lincoln	13,369	10,255
Baxter	9,298	8,527	Little River	18,731	8,908
Benton	31,611	27,716	Logan	20,563	20,774
Boone	16,890	15,816	Lonoke	22,544	19,283
Bradley	9,051	7,972	Madison	19,664	17,402
Calhoun	8,589	7,267	Marion	11,977	10,390
Carroll	18,648	17,388	Miller	17,556	14,714
Chicot	14,526	11,419	Mississippi	16,394	11,635
Clark	21,286	20,997	Monroe	16,816	15,336
Clay	15,686	12,200	Montgomery	20,444	7,923
Cleburne	11,620	11,362	Nevada	16,609	14,360
Cleveland	22,077	19,593	Newton	12,538	9,950
Columbia	19,772	19,459	Osachita	20,862	17,038
Conway	19,500	12,025	Perry	7,264	5,539
Craighead	21,270	21,714	Phillips	26,561	25,341
Crittenden	14,529	13,940	Pike	10,301	8,527
Cross	11,051	7,693	Polk	7,025	9,228
Dallas	11,618	9,200	Folk	18,352	9,228
Desha	11,511	10,324	Pope	21,715	19,468
Drew	19,451	17,352	Franklin	11,775	11,374
Faulkner	20,780	18,342	Fulaski	63,179	47,382
Franklin	17,985	16,934	Randolph	17,156	14,465
Fulton	12,917	10,984	St. Francis	17,157	13,543
Garland	18,773	15,328	Saline	13,122	11,311
Grant	7,671	7,760	Scott	13,189	12,635
Greene	16,979	12,908	Searcy	11,988	9,664
Hempstead	24,101	22,796	Sebastian	36,935	33,200
Hot Spring	12,746	11,903	Sewier	18,389	10,072
Howard	14,076	15,729	Sharp	12,199	10,418
Independence	22,557	21,961	Stone	8,100	7,048
Izard	13,804	18,028	Union	22,495	14,977
Jackson	18,983	15,179	Van Buren	11,320	8,507
Jefferson	29,722	40,881	Washington	34,256	32,024
Johnson	17,448	16,758	White	24,864	22,946
Lafayette	10,594	7,700	Woodruff	16,304	14,009
Lawrence	16,491	12,984	Yell	22,750	18,015

There are 184 incorporated towns, cities, and villages in the State. Little Rock has a population of 38,307. Among the other larger places are the following: Fort Smith, 11,587; Pine Bluff, 11,496; Hot Springs, 9,073; Helena, 5,550; Texarkana, 4,914; Jonesboro, 4,508; Fayetteville, 4,061; Eureka Springs, 3,572; Mena, 3,432; Paragould, 3,322; Newport, 2,860; Camden, 2,830; Arkadelphia, 2,739; Van Buren, 2,573; Batesville,

2,327; Rogers, 2,158; Prescott, 2,005; Conway, 2,003.

Most of the larger cities are disappointed over the returns and sure something is wrong, as estimates based on the school census give larger figures. The Governor is reported as saying: "These figures can not be otherwise than erroneous. Through these imperfect census returns Arkansas will get only one extra congressman, when we should have had two."

Finances.—The receipts and expenditures of the State for the two years ending Sept. 30, 1900, and the balances due each fund on Oct. 1, 1900, are shown in the following statement from the biennial report of the Auditor:

General revenue—amount received, \$1,161,724; warrants redeemed, \$1,143,068.43; balance on hand, \$32,908.07. Sinking fund—amount received, \$224,443.25; warrants redeemed, \$237,057.53; balance on hand, \$7,305.99. Common school fund—amount received, \$927,841.23; warrants redeemed, \$924,960.32; balance on hand, \$57,213.77. Permanent school fund—amount received, \$2,967,423.13; warrants redeemed, \$1,137,179.32; balance on hand, \$2,120,799.25. Sixteenth section fund (transferred to permanent school fund)—amount received, \$221,791.89; warrants redeemed, \$575,315.68. Confederate pension fund—amount received, \$100,052.07; warrants redeemed, \$101,648.52; balance on hand, \$17,646.45. Direct tax—balance on hand, \$15,315.73. Swamp land fund—amount received, \$47,830.91; warrants redeemed, \$1,974.58; balance on hand, \$49,070.23. Internal improvement fund—amount received, \$59,839.10; balance on hand, \$61,316.80. State Capitol fund—amount received, \$48,029.64; warrants redeemed, \$36,663.44; balance on hand, \$11,366.20. Penitentiary deposit fund—amount received, \$230,359.61; warrants redeemed, \$230,359.61. Tax due counties—amount received, \$53,207.57; warrants redeemed, \$49,360.99; balance on hand, \$13,378.08. Tax due cities—amount received, \$322.65; warrants redeemed, \$114.04; balance on hand, \$642.13.

Valuations.—The value of real estate, as shown by the tax books, is \$127,062,908. The value of personal property as assessed is \$62,936,142.

In a suit to determine the liability of Garland County for a part of the indebtedness of Hot Spring County, from which it was set off in 1873, the court adjudged that Garland should pay Hot Spring \$18,880 as its share of the debt at the time of separation.

Education.—The school population is 472,508. The enrollment in 1899 was 296,785, of whom 76,049 were colored. In private and denominational schools there were 5,835.

Twenty-one young men and women were graduated at the State University in June.

Charities.—The report of the State Board of Charitable Institutions, published in May, gives the following data:

The current expenses of the lunatic asylum from April 1, 1897, to March 31, 1898, were \$56,956.73; from April 1, 1899, to March 31, 1900, \$59,449.88, an increase of \$2,493.15 for the year just closed. The record shows that on April 1, 1897, there were 507 patients on hand in the asylum, and on April 1, 1899, there were 605, an increase of 98 patients.

The current expenses of the deaf-mute institute from April 1, 1897, to March 31, 1898, were \$19,076.62; from April 1, 1899, to March 31, 1900, \$19,352.86, an increase of \$276.24 for the year just closed. The record shows that on April 1, 1897, there were 208 pupils in attendance, and on April 1, 1899, there were 250, an increase of 42.

The current expenses of the school for the blind

from April 1, 1897, to March 31, 1898, were \$13,723.85, and from April 1, 1898, to March 31, 1900, \$14,714.23, an increase for the year just closed of \$990.38. The record shows that on April 1, 1897, there were 167 pupils in attendance at the school for the blind, and on April 1, 1899, 192, an increase of 25 pupils.

The last Legislature increased the current expense appropriation of the lunatic asylum \$10,000, the deaf-mute institute \$4,000, and the school for the blind, \$11,000.

Railroads.—Among the States having new railroad mileage built in 1899, Arkansas stood third, with 282 miles. During the first half of 1900 62 miles were constructed in the State. The net incomes of the several roads for the year ending June 30, 1899, as reported to the railroad commission, were: St. Louis, Iron Mountain and Southern, \$1,065,026.71; St. Louis and Southwestern, \$497,830.09; Choctaw and Memphis, \$32,834.08; Paragould and Southeastern, \$12,214.59; Arkansas Midland, \$8,765.02; Eureka Springs, deficit, \$6,756.07; Hoxie, Pocahtontas and Northern, \$2,844.67; Dardanelle and Russellville, \$10,607.83; White and Black River Valley, \$27,693.61; Stuttgart and Arkansas River, deficit, \$3,366.69; Des Arc and Northern, \$2,916.43; Louisiana and Arkansas, \$29,164.04.

The report of the Kansas City, Fort Scott and Memphis for the year ending June 30, 1900, shows an increase of \$981,830, or 21½ per cent., in earnings; of \$636,493, or 21½ per cent., in expenses; and of \$345,337, or 25½ per cent., in net earnings. In addition \$100,000 was appropriated for improvements and transferred to the general improvement fund, \$100,000 having also been deducted from the year's miscellaneous earnings for the same purpose. The surplus balance for the year, after all deductions, was \$28,406.

The Kansas City, Memphis and Birmingham road, operated in the same interest, shows for the fiscal year an increase of \$270,139, or 19 per cent., in gross earnings and of \$157,057, or 42 per cent., in net receipts.

Charters have been granted to the Arkansas and Missouri and the Arkansas Western. The former is to run from Little Rock to a point on the State line in Boone County, and the latter from Howe, Indian Territory, to Waldron, Ark., about 36 miles.

The Stuttgart and Arkansas River was sold in April to the Des Arc and Searcy. The White and Black River Valley was leased in June to the Choctaw, Oklahoma and Gulf.

The commission gave an opinion in a case involving their right to regulate rates, holding that the transportation of freight between two points in the State, though the line of railroad may pass outside the borders of the State for a few miles, is intrastate or domestic commerce and subject to regulation by the commission.

Business and Products.—Figures published in August show the capitalization of corporations registered with the Secretary of State from Jan. 1, 1899, as follows: Manufacturing associations, \$23,868,575; railroad companies, \$92,130,000; bank companies, \$385,000; building associations, \$7,000,000; loan and investment companies, \$135,000; telegraph and telephone companies, \$109,200; total, \$113,827,775.

The cotton acreage this year was 1,718,901; the estimated crop, 809,000 bales; the consumption in mills of the State, 2,380 bales.

From a review of the lumber trade for July it appears that of 135 mills reporting, which are in 6 States and 1 Territory, 41 were in Arkansas and Indian Territory; that they cut 40,062,812 feet

and shipped 51,156,821, and had on hand 71,502,475.

A first prize was awarded at the Paris Exposition to an exhibit of apples from the State experiment station, prepared by the pomologist at the university.

State Laws.—From the report of the Attorney-General's office is learned that under the anti-trust law passed by the last Legislature 225 suits were brought against the 63 fire insurance companies doing business in this State, to subject them to the penalty of the act. Proceedings were instituted also against the express companies, Waters-Pierce Oil Company, American Tobacco Company, Continental Tobacco Company, and the various cotton-seed oil companies operating in this State.

The construction of the act was tested in the Supreme Court under the style of *State vs. Etna Fire Insurance Company* and *The State vs. Lancashire Fire Insurance Company*, one series of which was affirmed, the other, carrying the constitutionality of the act, was reversed. The court having decided adversely to the opinion of the Attorney-General, the other cases were dismissed.

Lawlessness.—A negro prisoner who had confessed to the murder of an Italian fruit vender was taken from a guard and hanged by a mob near Helena, April 16. A negro school-teacher, suspected of having broken into a store, was shot and killed by a party of men, who took him and another suspected negro to a lonely place to frighten them into confession. It was declared that the killing was not intentional, and that only "white-capping" was intended.

Labor.—A decision was handed down in the United States District Court at Fort. Smith, in January, making permanent the temporary injunction issued previously, restraining the striking coal-miners of western Arkansas from interfering with nonunion men who took places in the mines.

Before the State election the labor unions were asking of candidates for the Legislature pledges as to proposed legislation in which they were interested. A set of questions used in Sebastian County is as follow:

1. Will you favor a bill making eight hours a legal day's work, with a penalty for the violation of the same?

2. Are you in favor of a law establishing semi-monthly or weekly pay day?

3. Are you in favor of the abolition of the scrip system now in use by corporations?

4. Will you favor a law compelling all corporations doing business in the State of Arkansas to be incorporated under the State laws and chartered by the State?

5. Are you in favor of a law establishing a uniform system of text-books to be published by the State and furnished at cost to all patrons of the public schools of the State?

Political.—Senator Berry and Gov. Jones were candidates before the primaries for the office of United States Senator, but the Governor withdrew from the contest, March 23.

The election for State officers was held Sept. 3. There were three candidates for Governor, but only the Democrats put out a full State ticket. The Republicans and the Populists made nominations for Governor only. The Republican candidate was Herman L. Rimmel and the Populist nominee was A. W. Files. Following is the Democratic ticket: For Governor, Jeff Davis; Secretary of State, John W. Crockett; Attorney-General, George W. Murphy; State Auditor, T. C. Monroe; State Treasurer, Thomas E. Little; Commissioner

of Lands, J. W. Colquitt; State Superintendent of Public Instruction, J. J. Doyne; Commissioner of Mines, Manufactures, and Agriculture, Frank Hill; Associate Justice of Supreme Court, Carroll D. Wood; Railroad Commissioners, F. M. Hanley, Abner Gaines, J. G. Wallace.

The platform of the Democratic convention, June 26, 27, approved the national platform of the party as adopted at Chicago in 1896; recognized the Monroe doctrine as a cardinal tenet of the party, and favored its strict observance; favored the building of the Nicaraguan Canal by the Government; opposed the donation of the public lands of the United States to private corporations. Trusts and all illegal combinations were denounced. The platform approved the action of the last Legislature in passing laws against them, and pledged the party to the passing of laws to prohibit their operation in Arkansas.

The set of resolutions at the Republican convention for nominating delegates to the national convention, March 20, favored expansion, opposed trusts, favored the Nicaraguan Canal to be owned and controlled by the Government, and approved the protective tariff policy. It denounced the Goebel act and the Nesbitt act and "all similar laws in Arkansas and elsewhere concocted to cheat the honest voter, and to enable a corrupt minority to govern."

The State Republican convention, July 7, declared in favor of a reform school, completion of the Statehouse, compulsory arbitration in labor troubles, and nonpartisan educational and charitable boards, and opposed competition of convict with free labor, and all forms of trusts.

The Prohibitionists nominated a presidential elector at large, and declared: "The Democratic and Republican parties are equally corrupt and in sympathy with the liquor power of this nation, and therefore unworthy the support of any Christian or philanthropist."

The vote for Governor stood: Davis, Democrat, 88,037; Rimmel, Republican, 40,701; Files, Populist, 3,641. The State Senate will be entirely Democratic; the House will have 1 Independent, 2 Republicans, and 97 Democrats.

The total vote for presidential electors was 127,839, compared with 149,347 in 1896. The Democratic candidates received 81,142 votes; the Republican, 44,800; and the Prohibitionist, 584—a Democratic majority of 35,758.

AUSTRALASIA, one of the grand divisions of the globe, consisting of the continent of Australia and island colonies of Great Britain, with interjacent islands. With the exception of the Dutch and German portions of New Guinea, the German protectorate of Bismarck Archipelago and that of the northern Solomon Islands, now diminished by the cession of the Howe group, the French colony of New Caledonia, and the New Hebrides and smaller islands under native rule, all the islands of Australasia are British colonies and dependencies. The five colonies of Australia and the colonies of Tasmania and New Zealand are self-governing, having each its representative Legislature, with a responsible ministry, disposing of its own revenues, and making its own laws under a charter granted by the British Parliament, subject to a certain reserved veto power of the Imperial Government. The British Crown is represented in each colony by a governor, who as the executive head of the colonial Government acts on the advice of the responsible ministers selected from the party or coalition that forms the majority in the Legislative Assembly. The Crown colony of Fiji is administered in accordance with native laws and customs, and its Gov-

ernor is High Commissioner for the Western Pacific, intrusted with the supervision of British interests in the islands under native rule.

Area and Population.—The area in square miles of the British Australasian colonies, according to the latest surveys, and their estimated population on Dec. 31, 1898, or June 30, 1899, are given in the following table:

COLONIES.	Area.	Population.
New South Wales.....	810,700	1,357,050
Victoria.....	57,884	1,176,854
Queensland.....	668,497	498,533
South Australia.....	908,090	862,897
Western Australia.....	973,930	168,480
Tasmania.....	26,385	198,700
New Zealand.....	104,471	750,389
Fiji and Rotumah.....	8,045	121,738
Total.....	3,085,592	4,680,681

An estimate made for the purpose of apportioning representation under the federation scheme gives New South Wales 1,348,400; Victoria, 1,162,900; Queensland, 482,400; South Australia, 370,700, and Tasmania, 182,300 inhabitants.

The population of New South Wales on June 30, 1899, was composed of 725,900 males and 631,150 females. At the end of 1899 it was estimated at 729,005 males and 627,645 females; total, 1,356,650, including 8,250 aborigines. The population of Sydney, the capital, was estimated in 1898 at 426,950, including suburbs.

In Victoria it was estimated in 1899 that 666,110 of the total population lived in towns. Melbourne, the capital, in 1897 contained 469,880 inhabitants, nearly two fifths of the population of the colony, while in Ballarat there were 44,848, in Bendigo, or Sandhurst, 42,992, and in Geelong 23,334. The emigration from the colony has for five years past exceeded the immigration, chiefly owing to the exodus to the gold fields of Western Australia.

Brisbane, the capital of Queensland, contained at the end of 1898 a population of 107,840 souls, its environs included. The Chinese immigrants into Queensland in 1898 numbered 742, and the emigrants 478; the Polynesian immigrants numbered 1,182, and the emigrants 731.

The population estimated for South Australia on Dec. 31, 1898, consisted of 187,251 males and 175,646 females. In the northern territory there were 4,903 inhabitants, of whom only 409 were females, the bulk being Chinese coolies. Adelaide, the colonial capital, had a population of 147,610.

The population of Western Australia comprised 111,354 males and 57,126 females. In 1891 there were 49,782 persons in the colony, and then the increase had been 68 per cent. in ten years. Perth, the capital, had an estimated population of 39,600 in the beginning of 1899.

The white population of New Zealand at the census of April 12, 1896, was 703,360, consisting of 371,415 males and 331,945 females. Of this total 690,003 were British-born, and of these 441,061 were born in New Zealand and 215,161 were born in the United Kingdom, 110,541 of the latter in England, 2,148 in Wales, 50,435 in Scotland, and 46,037 in Ireland. Of the total population, 15.13 per cent. were agricultural, pastoral, mineral, or other primary producers, 7.18 per cent. were employed in commerce, 4.11 per cent. were domestics, 2.74 per cent. were engaged in the professions, 8.93 per cent. were of undefined occupations, and 58.25 per cent. were dependents. The population as estimated at the end of 1899 includes 39,854 Maoris and 3,711 Chinese. Of the Maoris, the number including 3,503 half-castes

and 229 Maori wives of white men, 21,673 were males and 18,181 females. The capital of New Zealand is Wellington, which had at the last census 41,758 inhabitants, with its suburbs, while Auckland had 57,616, Christchurch 51,330, and Dunedin 47,280. Of the total population of the colony, 307,294 lived in boroughs, 391,735 in the rural districts, 950 on adjacent islands, and 3,381 on ships.

The population of Fiji, as estimated for Dec. 31, 1898, comprised 67,245 males and 54,493 females. The European population was 3,927, of whom 2,444 were males and 1,483 females; Indians numbered 12,320, of whom 8,293 were males and 4,027 females; Fijians, 98,954, comprising 52,656 males and 46,298 females; Polynesians, Rotumans, half-castes, and others, 6,537, comprising 3,852 males and 2,685 females. Among the natives in 1898 there were 4,300 deaths to 3,481 births.

The movement of population in the several colonies for 1898 was as follows:

COLONIES.	Marriages.	Births.	Deaths.	Excess of births.	Net immigration.
New South Wales..	8,888	36,222	16,661	19,561	5,845
Victoria.....	7,760	30,170	18,096	11,477	* 2,789
Queensland.....	2,072	13,363	6,343	7,090	6,846
South Australia.....	2,214	8,945	4,675	4,270	714
Western Australia.....	.....	4,998	2,716	2,282	3,985
Tasmania.....	2,097	4,580	2,859	2,221	4,751
New Zealand.....	5,091	18,955	7,244	11,711	2,696
Fiji.....	.....	3,927	4,567	† 630	.....

* Net emigration.

† Excess of deaths.

Finances.—The revenue and expenditure of the several colonies for 1898 and the state of their debts at the end of the fiscal year ending June 30, 1899, in New South Wales, Victoria, Queensland, South Australia, and Western Australia, on March 31, 1899, in New Zealand; on March 31, 1898, in Tasmania; and on Dec. 31, 1898, in Fiji, are shown in the following table:

COLONIES.	Revenue.	Expenditure.	Debt.
New South Wales.....	£20,304,253	£29,219,940	£68,761,666
Victoria.....	6,837,468	6,632,444	48,354,277
Queensland.....	4,174,066	4,024,170	38,598,414
South Australia.....	2,665,477	2,535,840	24,481,580
Western Australia.....	2,004,943	2,980,465	10,493,968
Tasmania.....	906,223	830,108	8,412,904
New Zealand.....	4,980,129	4,858,511	46,868,006
Fiji.....	94,165	87,594	206,216

Of the revenue of New South Wales, £2,511,298 came from taxation, £1,976,816 from lands, £4,610,546 from services, and £205,593 from miscellaneous sources. The net revenue for the year ending June 30, 1899, was £9,572,912. The revenue from services consists chiefly of the net receipts from railways, tramways, posts, and telegraphs. The revenue from taxation in 1899 amounted to £2,558,958, of which £1,621,062 came from import and excise duties and the remaining £937,896 from stamps, land tax, income tax, and licenses. The net expenditure for 1899 was £9,553,144. Of the expenditure of 1898 railways and tramways took £1,812,039, posts and telegraphs £694,862, interest on the public debt £2,548,794, immigration £186, instruction £747,468, and other public works and services £3,754,019. Of the public debt, 80 per cent. was expended for railways, tramways, telegraphs, water supply, and sewerage, and these public services paid a net return of 3.46 per cent. on the total amount expended, which, exclusive of redemptions, up to June 30, 1899, amounted to £62,154,540, the expenditure from loans on railways

and tramways having been £41,226,478, on telegraphs and telephones £1,013,484, on water supply and sewerage £8,999,531, and on other works and services £10,915,047. The estimated wealth of the colony at the end of 1898 was £547,821,500, of which £169,705,500 was public and £378,116,000 private wealth.

Of the revenue of Victoria, taxation produced £2,910,237, of which £1,840,404 came from customs and other duties, £301,318 from excise, £115,451 from the land tax, £238,780 from duties on estates of deceased persons, £18,844 from the duty on bank notes, £172,400 from the stamp duty, £36,815 from tonnage dues, etc., and £186,225 from the income tax. The income from railroads was £2,602,547; from posts and telegraphs, £526,399; from public lands, £385,518; from other sources, £462,762. The expenditure for debt charges was £1,852,056; for railways, £1,559,379; for public instruction, £571,590; for posts and telegraphs, £508,851; for pensions, £336,836; for police and jails, £300,723; for charitable institutions, £279,043; for various public works, £242,294; for general expenses, £220,362; for defenses, £184,677; for law courts, £157,457; for mining and agricultural, £142,780; for public lands, £74,508; for other purposes, £156,495. The revenue for the financial year 1900 was estimated at £7,150,225; expenditure, £7,136,755.

In Queensland, customs produced £1,367,426 of the total revenue; excise and export duties, £143,905; stamps, £120,814; licenses, £57,279; dividend duty, £60,487; rent from pastoral leases, £334,960; other rents and sales of land, £240,145; railroads, £1,322,606; posts and telegraphs, £284,179. The principal expenditures were £1,326,963 for interest on the public debt, £79,785 for municipal and divisional endowments, £275,715 for public instruction, £181,470 for the Colonial Treasurer's department, £70,080 for the Department of Public Lands, £50,401 for the Department of Agriculture, £783,311 for the expenses of the railroads, £328,463 for the Department of Posts and Telegraphs. The expenditure from loans amounted for the year to £1,054,787, mostly for public works, including £628,812 on railways. The revenue for 1900 was estimated at £4,388,445 and expenditure at £4,304,420.

In South Australia the revenue is derived from customs duties, excise, posts and telegraphs, railways, and lands, and it is expended on railroads and public works and services and interest on the debt. Three quarters of the debt was contracted to build railways, waterworks, and telegraphs. The railroads earn 3½ per cent. a year. The customs receipts for 1900 were estimated at £603,321, the total receipts at £2,711,335; estimated expenditure, £2,711,140.

The revenue of Western Australia is obtained from customs, railroads, and public lands. The public debt on June 30, 1898, was £8,947,954.

The expenditure of Tasmania for 1898 includes a sum derived from territorial revenues that was applied to the redemption of loans. For 1899 the revenue of Tasmania was estimated at £946,780 and expenditure at £856,000.

Of New Zealand's revenue for 1899, customs supplied £1,965,018; stamps, posts, and telegraphs, £779,399; railways, £1,465,507; land tax, £298,053; income tax, £115,480; sales of land, £92,578. The chief expenditures were: £1,767,468 for public debt charges, £968,917 for railroads, £475,218 for education, £388,546 for posts and telegraphs, and £234,344 for constabulary and defense. The total expenditure on public works, including the expenses of raising loans,

from 1870 to March 31, 1899, was £31,985,750. The debt amounted to £61 14s. per capita.

Fiji derives its revenue mainly from customs, which produced £45,300 in 1898, and a tax on the natives, which produced £18,923. This tax is paid in produce, which they deliver to the Government, to be sold on their account. The expenditure on salaries in 1898 was £37,946; for other purposes, £40,648.

Commerce and Production.—The value of the foreign trade of the several colonies for 1898 is given in the following table:

COLONIES.	Imports.	Exports.
New South Wales.....	£24,458,560	£27,648,117
Victoria.....	16,768,904	15,872,246
Queensland.....	6,007,266	10,866,127
South Australia.....	6,184,805	6,795,774
Western Australia.....	5,241,965	4,960,006
Tasmania.....	1,650,018	1,808,360
New Zealand.....	8,230,800	10,517,965
Fiji.....	224,850	534,105

Of the total imports into New South Wales in 1898, the Australasian colonies furnished the value of £12,467,059, while of the exports £8,675,190 went to other colonies. The overland trade was £5,678,201 for imports and £4,121,784 for exports. The imports from the United Kingdom were £7,744,418; from British possessions besides Australasia, £864,420; from the United States, £1,602,954; from other countries, £1,774,709; exports to the United Kingdom, £7,734,890; to other British possessions, £725,383; to the United States, £5,951,287; to other countries, £4,561,368. The total exports of home produce in 1898 were £17,727,067 in value; exports of foreign produce, £9,921,050. The quantity of wool exported was 280,948,406 pounds, valued at £9,457,535. The export of tallow was £495,918 in value; coal, £962,668; hides and skins, £840,533; leather, £340,400; preserved and frozen meat, £721,457. The export of gold coin was £6,529,060. The value of the gold obtained from the mines of New South Wales in 1898 was £1,244,330, and in 1899 it was £1,936,885. The value of silver produced in 1898 was £59,278; of silver lead ore and metal, £1,644,777; of copper, £272,686; of coal, £1,271,832. The tin mines from their opening in 1872 to the end of 1898 produced the total value of £6,292,056. The production of sugar in 1899 was 282,206 tons; of wheat, 9,286,216 bushels; of oranges, 7,830,216 dozen. On Dec. 31, 1898, the colony possessed 41,241,004 sheep, 2,029,516 cattle, 491,553 horses, and 247,061 hogs. The duty on imports in New South Wales averages 5.15 per cent., taking free and dutiable goods together. In Victoria there is a protective tariff, and the duties collected amount to 12 per cent. of the total value of the imports. Wool, skins, and tallow, large quantities of which are imported from other countries to be re-exported or manufactured, are free of duty. The value of wool imported into Victoria in 1898 was £1,808,492; of hides and skins, £262,638; of cotton goods, £1,140,393; of woollen goods, £602,255; of sugar and molasses, £665,014; of live stock, £732,001; of iron and steel, £644,890; of timber, £344,024; of coal, £257,688; of silks, £345,633; of tea, £300,940; of oils, £239,593; of all other goods, £9,425,343. The exports of gold coin and bullion from Victoria in 1898 were £5,947,195; of wool, 131,850,560 pounds, valued at £4,036,968; of live stock, £255,664; of leather and harness, £318,868; of cereals and flour, £638,047; re-export of tea, £160,873; exports of sugar and molasses, £150,431; of clothing, £136,776; of tallow, £94,508; of hides and skins, £373,054; of butter, £730,323;

of frozen meat, £177,348; of all other articles, £2,746,189. Of the total imports in 1898 the United Kingdom furnished £6,195,134; Australasian colonies, £7,070,126; India, £287,829; Ceylon, £149,397; Canada, £33,745; other British possessions, £265,379; the United States, £883,472; Germany, £578,298; France, £199,849; Belgium, £122,236; Sweden and Norway, £107,833; Java and the Philippine Islands, £59,110; China, £56,844; other foreign countries, £159,646. Of the total exports, the United Kingdom received £6,740,420; Australasian colonies, £6,642,230; India, £509,332; Ceylon, £15,484; Canada, £651; other British possessions, £220,731; the United States, £67,561; France, £806,470; Germany, £544,041; Belgium, £225,402; Java and the Philippine Islands, £14,523; other foreign countries, £85,401. The value of the gold raised in Victoria in 1899 was £3,449,644, against £3,349,032 in 1898. The factories of the colony, having a total valuation of £12,000,000, produce many of the articles used by the colonists. Agriculture is developed further than in other parts of Australia. The yield of wheat in 1899 was 19,581,000 bushels.

Of the imports into Queensland in 1898, the value of £2,757,981 came from Australasian colonies, £2,559,244 from the United Kingdom, £155,299 from other British possessions, £278,837 from the United States, and £255,905 from other foreign countries. Of the exports, £6,269,090 went to Australasian colonies, £4,352,067 to the United Kingdom, £100,974 to other British possessions, and £133,996 to foreign countries. The chief exports were gold of the value of £2,855,781; wool, £3,018,098; sugar, £1,329,876; hides and skins, £466,265; tin, £31,871; silver, £49,825; copper, £6,430; peas, shelled, £109,588; frozen meat, £676,698; preserved and salted meat, £265,872; meat extract, £216,640; fruit, £96,313. The gold output of 1898 was 920,048 ounces, and in 1899 it was increased to 947,626 ounces. The value of the coal raised in 1898 was £150,493; of tin, £36,502; of silver, £10,585. There were 17,552,608 sheep, 5,571,292 cattle, 490,460 horses, and 127,081 hogs in the colony in 1898.

Of the commerce of South Australia for 1898 the share of the other Australasian colonies was £3,348,622 of the imports and £3,332,286 of the exports; the share of the United Kingdom, £1,974,818 of the imports and £2,306,202 of the exports; that of British possessions not in Australasia, £193,829 of the imports and £565,467 of the exports; that of the United States, £310,886 of the imports and £915 of the exports; that of all other foreign countries, £356,650 of the imports and £590,904 of the exports. The export of wool was £945,589 in value; wheat, £15,911; flour, £235,752; copper, £244,865. The wheat crop was 8,778,900 bushels. The value of the mineral exports was £350,372. There were 161,774 horses, 260,343 cattle, and 5,012,620 sheep in 1898. In 1899 there were made 1,080,772 gallons of wine, of which 504,065 gallons were exported.

Of the imports of Western Australia, £2,061,872 in value came from, and of the exports £2,293,652 went to, the United Kingdom. The export of gold was £3,990,698; of pearls, about £20,000; of pearl shell, £49,480; sandalwood, £31,812; of timber, £326,195; of wool, £287,731; of skins, £44,545. The trade with other Australasian colonies was £2,743,761 of imports and £2,462,961 of exports; with other British possessions, £165,123 of imports and £138,692 of exports; with the United States, £91,268 of imports; with other countries, £189,941 of imports and £64,701 of exports. The value of gold exported has increased

from £879,748 in 1895. There were 3,069 leases of gold mines in 1898, and 16,468 men were employed in the mines, the output of gold being 1,050,184 ounces. In 1900 the export of gold was £6,431,063 in value, bringing the total production up to £20,000,000. For mining copper 27 leases have been issued; for tin mines, 2; for lead mines, 41; for coal mines, 63. The live stock at the close of 1898 consisted of 62,442 horses, 245,907 cattle, and 2,244,888 sheep.

In Tasmania, the wheat crop in 1899 was 2,303,512 bushels. Oats, potatoes, and hay are important crops, and fruit-growing is a great industry, large quantities of apples and other fruits being exported to the other colonies and to England. The live stock in 1899 consisted of 29,797 horses, 148,558 cattle, 1,493,638 sheep, and 45,294 hogs. Iron, tin, galena, copper, gold, and coal mines are worked. The value of gold exported in 1898 was £188,478; of silver, £167,618; of copper ore, £378,565; of tin, £141,162. The export of wool was £254,960 in value; of timber and bark, £60,012; of hops, £22,012; of fruit and jam, £183,345. Of the total imports, £465,544 came from the United Kingdom, £720,684 from Victoria, £273,227 from New South Wales, £140,158 from other British colonies, and £50,405 from foreign countries. Of the total exports, £431,518 went to the United Kingdom, £614,640 to Victoria, £635,110 to New South Wales, £99,948 to other British possessions, and £22,153 to foreign countries.

The exports of colonial produce from New Zealand in 1898 amounted to £10,324,988. The export of wool was 149,385,815 pounds, valued at £4,645,804; of gold, 230,175 ounces, valued at £1,080,691; of Kauri gum, 9,905 tons, valued at £586,767; of frozen meat, 1,551,773 hundred-weight, valued at £1,698,750; of butter, 96,801 hundred-weight, and of cheese, 68,711 hundred-weight, valued together at £539,466; the value of grain, pulse, and flour, £142,066; of tallow, £302,141; of hides, skins, and leather, £427,256; of live stock, £19,708; of bacon and hams, £8,211; of preserved meats, £97,171; of grass seed, £78,519; of phormium, or New Zealand hemp, £74,556; of other colonial produce, £623,882; of British and foreign produce, £124,850; of specie, £68,117, against £19,191 of imports. The gold mines of New Zealand are mostly situated on Government lands. The production of gold since they were first opened in 1857 has been £54,453,325. The production of silver in 1898 was 293,851 ounces, value £33,107; of coal, 907,033 tons, value £453,517; of Kauri gum, 9,905 tons, value £586,767. The production of gold for 1899 was 470,585 ounces, value £1,513,242. The wheat crop for 1898 was 13,073,000 bushels, nearly 33 bushels to the acre; the oat crop, 16,511,000 bushels; the barley crop, 1,678,000 bushels. The live stock in 1899 consisted of 258,115 horses, 1,203,024 cattle, 19,673,725 sheep, and 193,512 hogs. The total value of imports in 1899 was £8,739,633; of exports, £11,938,335. The exports of dairy products were valued at £701,742; gold export, £1,513,173.

In Fiji the European settlers had 22,078 acres in 1898 planted to sugar cane, 21,544 acres planted to cocoanut palms, and 1,537 acres planted to bananas. The export of sugar was 34,156 tons, valued at £409,884; of rum, 111,088 gallons, valued at £13,886; of copra, 6,474 tons, valued at £63,140; value of bananas, £25,478.

Navigation.—The number of vessels entered at the ports of New South Wales during 1898 was 3,316, of 3,464,867 tons, of which 2,985, of 3,005,748 tons, were British or colonial, and 331, of

459,119 tons, foreign. The total number cleared was 3,263, of 3,455,061 tons, of which 2,933, of 2,094,250 tons, were British or colonial, and 330, of 460,811 tons, were foreign. The merchant fleet of the colony consisted of 488 sailing vessels, of 52,948 tons, and 494 steamers, of 68,331 tons.

The number of vessels entered at Victorian ports was 2,008, of 2,472,745 tons, of which 378, of 895,384 tons, were British, and 1,498, of 1,274,958 tons, were colonial. The total number cleared was 2,043, of 2,483,992 tons, of which 832, of 900,703 tons, were British and 1,531, of 1,278,668 tons, were colonial. The merchant shipping of the colony comprised 250 sailing vessels, of 39,715 tons, and 149 steamers, of 61,967 tons.

In Queensland 615 vessels, of 602,006 tons, were entered, and 598, of 596,313 tons, were cleared, in 1898. The number entered from the United Kingdom was 58, of 95,702 tons; from Australasian ports, 420, of 400,741 tons. In the coasting trade 6,588 vessels, of 3,524,904 tons, were entered. The registered shipping of the colony in 1898 comprised 149 sailing vessels, of 10,075 tons, and 91 steamers, of 12,943 tons.

In South Australian ports 1,068 vessels, of 1,722,358 tons, were entered and 1,083, of 1,760,167 tons, were cleared during 1898. The shipping of the colony consisted of 107 sailing vessels, of 28,413 tons, and 222 steamers, of 22,573 tons.

In the ports of Western Australia during 1898 there were 633 vessels, of 1,199,894 tons, entered and 631, of 1,189,732 tons, cleared. The shipping of the colony consisted of 133 sailing vessels, of 5,799 tons, and 28 steamers, of 5,551 tons.

In New Zealand 233 vessels, of 293,873 tons, were entered and 210, of 218,990 tons, cleared at Auckland in 1898, and at Wellington, the other principal port, 153, of 203,774 tons, were entered and 138, of 268,312 tons, cleared.

Railroads, Posts, and Telegraphs.—In the Australian colonies the railroads and telegraphs are public property, as well as the wharves and docks, the tramways in cities, the waterworks and irrigation works, and the land also, excepting the relatively small areas that have been sold to agricultural settlers. The railroads of New South Wales, on June 30, 1899, had a total length of 2,707 miles. The capital expenditure was £37,992,276; gross earnings for 1899, £3,145,273; working expenses, £1,890,442.

The railroads in operation in Victoria at the end of 1898 had a total length of 3,123 miles, built at a cost of £38,602,304. The receipts for the fiscal year were £2,608,896, and expenses £1,646,054. The net profits were 2.49 per cent. on the cost and 2.71 per cent. on the borrowed capital, while the average rate of interest paid by the Government is 3.90 per cent. About £9,000,000 has been paid out of the revenue in the course of a series of years to meet deficits in the railroad accounts. There were 43,090,749 passengers and 2,408,665 tons of freight carried in 1898.

In Queensland there 2,742 miles of railroads in operation in 1898, which had cost the Government £18,545,631 to build. The receipts for 1898 were £1,263,153; expenses, £728,161. Including the expenses of raising loans, etc., the total expenditure, including that on 58 miles not yet opened, was £20,215,894.

South Australia had 1,870 miles of railroad open to traffic at the close of 1898.

In Western Australia there were 1,850 miles of railroad in operation on June 30, 1899, including 495 miles of private line.

The railroads of New Zealand had a length of 2,257 miles on March 31, 1899, including 167 miles of private lines. The receipts of the Government

railroad were £1,469,665 and the expenses £929,737. There were 4,955,553 passengers and 2,744,441 tons of freight carried. The total capital expenditure up to that date had been £17,190,967.

The number of letters carried in the mails of New South Wales during the year ending June 30, 1898, was 75,650,065; postal cards, 1,331,630; newspapers, 42,570,850; packets, 16,497,334; money orders, 410,772, for £1,432,373; postal notes, £420,113.

The post office in Victoria showed for 1898 receipts amounting to £531,367, including telegraph and telephone receipts, and £498,192 of expenditure.

The Queensland post office in 1898 carried 19,723,905 letters, 11,647,822 newspapers, 5,130,733 packets, and 238,240 parcels; receipts, £182,207.

In South Australia the postal traffic for 1898 was 19,391,816 letters, 1,501,802 packets, and 8,803,194 newspapers.

The post office of Western Australia carried 13,132,988 letters, 296,712 postal cards, 7,390,294 newspapers, and 3,261,436 packets in 1898.

The New Zealand post office in 1898 forwarded 34,737,316 letters, 917,631 letter cards, 1,479,964 postal cards, 16,822,704 books and parcels, and 15,085,487 newspapers, and issued 318,370 and paid 229,720 money orders. The receipts of the postal and telegraph department for the year ending March 31, 1899, were £445,770, and expenses £390,197.

New South Wales had 13,242 miles of telegraph lines, with 35,630 miles of wire, at the beginning of 1899. The capital cost was £989,423. The number of telegrams dispatched in 1898 was 2,866,570; receipts, £428,995; net revenue, £158,062.

The telegraph lines of Victoria had a length of 6,599 miles, with 14,729 miles of wire, in 1898. The number of messages sent in that year was 1,806,184. The receipts were £97,565.

Queensland had 10,088 miles of telegraph lines, with 18,565 miles of wire. The number of private messages was 1,061,068, besides 151,967 foreign messages received. The receipts were £88,727.

The telegraphs of South Australia had a length of 5,874 miles, including telephone lines; the length of wire was 14,858 miles.

The length of telegraph lines in Western Australia at the end of 1898 was 5,886 miles, with 8,650 miles of wire. The number of dispatches sent during the year was 1,178,928; revenue, £79,754. A cable is to be laid from Freemantle to Cape Colony.

The telegraph lines of New Zealand on March 31, 1899, had a total length of 6,736 miles, with 18,746 miles of wire. The number of messages for the year was 2,960,738. The telephones as well as the telegraphs belong to the Government, and the receipts from both were £145,295.

Australian Federation.—When Australia was first settled the seat of government was in the original colony of New South Wales, established in 1788, until Van Dieman's Land, now Tasmania, set up an independent administration in 1825. This example was followed successively by Western Australia, South Australia, Victoria, and lastly Queensland. Before the Victorian Government was founded in the Port Phillip Settlement, which took place in 1850, Earl Grey said that a central authority to decide questions of interest to Australia collectively was necessary, and in 1856 he introduced proposals for constituting such a central authority; but at that time they met with no general support. From the time of the establishment of the Dominion of Canada, in 1867, Sir Henry Parkes labored to bring about a

union of the Australasian colonies, but the activity of Germany and France in the Pacific in 1883 first impressed the idea on the Australians and led to the establishment of the Federal Council as an experimental step. This was simply an advisory body, with neither legislative nor executive authority. New South Wales refused to join in its deliberations from the first, and South Australia subsequently withdrew. The Russian scare in 1890 gave a fresh impetus to the movement for federation. A conference was held in Melbourne, followed by a convention in Sydney in 1891, at which the first commonwealth bill was drafted. This was submitted to the colonial Parliaments, but the popular demand for federation was not strong enough to secure its adoption. The Federal League was then founded to enlighten the Australian people regarding the benefits of federation, and so successful was this educational movement that in 1895 the Premiers in a conference agreed to bring forward enabling bills in their several Parliaments for providing a convention of delegates which should be instructed and empowered to frame a constitution. This constitution was to be submitted to the separate Parliaments sitting in grand committee; the amendments made by the several Parliaments were then to be referred back to the convention, and after they had been considered a final draft was to be made and submitted to the people of the several colonies to be voted on in a general referendum. The convention was held at Adelaide in March, 1897. Queensland was not represented, its Government having refused to pass an enabling bill. The constitution drafted at that meeting was based on the one drawn up in 1891, of which Sir Samuel Griffith and Edmund Barton were the principal authors. The convention met again at Sydney before the close of 1897 to consider and digest the amendments made by the several Parliaments, adjourned to Melbourne in 1898, and the final draft was submitted to popular vote in the several colonies. Queensland, as well as Western Australia, abstained from voting on the bill. There were 219,000 votes cast for, and 108,000 against, the bill, but in New South Wales it failed to secure the 80,000 votes that had been fixed as the minimum majority required to secure its adoption. The Government of New South Wales then proposed amendments, which were substantially adopted. Another referendum was proposed and agreed to. The people of Queensland voted this time, and the results were 377,600 votes for the bill and 141,500 against. Western Australia did not take part in this decision, but pressed for further amendments, which the other colonies declined to consider, the Premiers deciding that it was too late to change the constitution to which the people of five colonies had given the seal of their approval. In this form it was then forwarded for the sanction of the Imperial Parliament, accompanied by a bill authorizing the federation of the colonies under this palladium.

The draft bill for the federation of the Australasian colonies embodying the Federal Constitution was presented to the British Government for the sanction of the Imperial Parliament before the beginning of the session of 1900. It was the result of many years' discussion, and had been ratified by a referendum in the colonies that were ready to enter the federation as original states, viz., New South Wales, Victoria, Tasmania, Queensland, and South Australia. Western Australia desired a postponement until its people could also decide by a referendum whether they would accept the Federal Constitution, but the other colonies were not willing to grant further delay.

New Zealand still held aloof. The conference of Premiers, held at Sydney in January, 1900, voted unanimously that the bill should be passed without alteration. The principal clauses of the Constitution which the statesmen and jurists of Australia had drawn up and the people had ratified by a large majority are given below.

The commonwealth bill as finally adopted provided that the legislative power shall be vested in a Federal Parliament, consisting of the Queen, a Senate, and a House of Representatives, the Queen's representative being a Governor General, appointed by the Crown and receiving a salary from the commonwealth of £10,000 until the Parliament should otherwise decide its amount. Parliament shall sit once at least in the course of a year. The Senate is to be composed of Senators for each state, directly chosen by the people of that state, and sitting for a term of six years. The method of election was left to be defined later. The House of Representatives is to contain twice the number of the Senate, and its members are to be elected by the people of the whole commonwealth, the number of members provided by each state to be in proportion to the number of the people in that state; but in each original state there shall be at least five members apart from this consideration. The bill provided that the Queen should proclaim the union of the colonies adopting the Constitution, within a year of the passing of the act by the British Parliament, in a federal commonwealth under the name of the Commonwealth of Australia. The commonwealth act and all laws made by the Parliament of the commonwealth under the Constitution shall be binding on the courts, judges, and people of every state and of every part of the commonwealth, notwithstanding anything in the laws of any state; and the laws of the commonwealth shall be in force on all British ships, except ships of war, whose first port of clearance and port of destination are in the commonwealth. States of the commonwealth are such of the colonies of New South Wales, New Zealand, Queensland, Tasmania, Victoria, Western Australia, and South Australia, including the northern territory of South Australia, as for the time being are parts of the commonwealth, and such colonies and territories as may be admitted into the commonwealth or established by the commonwealth as states. The Parliament shall, subject to the Constitution, have power to make laws for the peace, order, and good government of the commonwealth with respect to trade and commerce with other countries and among the states; taxation, so as not to discriminate between states or parts of states; bounties on the production or export of goods, so that such bounties shall be uniform throughout the commonwealth; borrowing money on the public credit of the commonwealth; postal, telegraphic, telephonic, and other like services; the naval and military defense of the commonwealth and of the several states, and the control of the forces to execute and maintain the laws of the commonwealth; lighthouses, light-ships, beacons, and buoys; astronomical and meteorological observations; quarantine; fisheries in Australian waters beyond territorial limits; census and statistics; currency, coinage, and legal tender; banking other than state banking, also state banking beyond the limits of the state concerned, the incorporation of banks, and the issue of paper money; insurance other than state insurance, also state insurance extending beyond the limits of the state concerned; weights and measures; bills of exchange and promissory notes; bankruptcy and insolvency; copyrights, patents of inventions and

designs, and trade-marks; naturalization and aliens; foreign corporations, and trading or financial corporations formed within the limits of the commonwealth; marriage; divorce and matrimonial causes, and in relation thereto parental rights and the custody and guardianship of infants; invalid and old-age pensions; the service and execution throughout the commonwealth of the civil and criminal process and judgments of the courts of the states; the recognition throughout the commonwealth of the laws, the public acts and records, and the judicial proceedings of the states; the people of any race, other than the original race in any state, for whom it is deemed necessary to make special laws; immigration and emigration; the influx of criminals; external affairs; the relations of the commonwealth with the islands of the Pacific; the acquisition of property on just terms from any state or person for any purpose in respect of which the Parliament has power to make laws; the control of railways with respect to transport for the naval and military purposes of the commonwealth; the acquisition, with the consent of a state, of any railways of the state on terms arranged between the commonwealth and the state; railway construction and extension in any state with the consent of that state; conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one state; matters in respect of which this Constitution makes provision until the Parliament otherwise provides; matters referred to the Parliament of the commonwealth by the Parliament or Parliaments of any state or states, but so that the law shall extend only to states by whose Parliaments the matter is referred, or which afterward adopt the law; the exercise within the commonwealth, at the request or with the concurrence of the Parliaments of all the states directly concerned, of any power which may at the establishment of this Constitution be exercised only by the Parliament of the United Kingdom or by the Federal Council of Australasia; matters incidental to the execution of any power vested by this constitution in the Parliament or either house thereof, or in the Government of the commonwealth, or in the Federal judicature, or in any department or officer of the commonwealth.

The executive powers transferred to the commonwealth comprise the departments of posts, telegraphs, and telephones; naval and military defense; lighthouses, light-ships, beacons, and buoys; and quarantine. These can be taken over at any date after the establishment of the commonwealth. The chief command of the naval and military forces is vested, however, in the Governor General.

The bill provided that the judicial power of the commonwealth should be vested in a Federal supreme court, to be called the High Court of Australia, and in such other Federal courts as the Parliament might create and such other courts as it might invest with Federal jurisdiction, the High Court to consist of a chief justice and so many other justices, not less than two, as the Parliament should prescribe. The justices of the High Court and the other courts to be created by the Parliament were to be appointed by the Governor General in Council, and not to be removed except by the Governor General in Council on an address from both houses of Parliament in the same session praying for their removal on the ground of proved misbehavior or incapacity. They should receive such remuneration as the Parliament fixed, but it was not to be changed during their continuance in office. The High

Court should have jurisdiction, subject to such exceptions and regulations as the Parliament prescribed, to hear and determine appeals from judgments, decrees, orders, and sentences of any justice or justices exercising the original jurisdiction of the High Court, of any other Federal court or court exercising Federal jurisdiction, or of the Supreme Court of any state or any other state court from which an appeal lies to the Queen in Council, or as to questions of law of the Interstate Commission. No exception or regulation of the Parliament should prevent the High Court from hearing and determining appeals from the Supreme Court of a state in any matter in which at the establishment of the commonwealth an appeal lies to the Queen in Council, and the same conditions and restrictions on appeals to the Queen in Council should be applicable to appeals to the High Court unless the Parliament otherwise provides. No appeal should be permitted to the Queen in Council in any matter involving the interpretation of the commonwealth Constitution or the constitution of a state unless the public interests of some other part of the imperial dominions are involved. The royal prerogative to grant appeal from the High Court to the Privy Council would not be impaired except so far as the provisions of the Constitution limit it, but the Parliament would have power to impose further limitations. In matters arising under any treaty, affecting consuls or other representatives of other countries, in which the commonwealth is a party, between states or residents of different states, or in mandamus or injunction proceedings against officers of the commonwealth, the High Court should have original jurisdiction, and the Parliament might confer original jurisdiction in any matter arising under the Constitution or involving its interpretation, arising under any laws made by the Parliament, of admiralty and maritime jurisdiction, relating to the same subject matter claimed under the laws of different states. In admiralty and maritime jurisdiction or to conflicts in the laws of different states as to the same subject matter the Parliament could make laws defining the jurisdiction of any other Federal court than the High Court and defining the extent to which such jurisdiction should be exclusive of that which belongs to or is vested in the state courts, also investing any state court with Federal jurisdiction. Parliament may make laws conferring rights to proceed against the commonwealth or a state. The Federal jurisdiction of any court may be exercised by such number of judges as the Parliament prescribes. Trial of any offense against any law of the commonwealth shall be by jury, and every trial shall be held in the state where the offense was committed, but when it is not committed within a state the Parliament may prescribe the place of trial.

The Federal Constitution provides for a uniform postal and telegraph service, and at some time in the future a single control over railroad communications. Everything connected with the external relations of the six federating colonies will be a matter for the commonwealth and not for the state governments. A common tariff will be established for all the colonies, and at the same time there will be intercolonial free trade. The national defenses will be under one control. The Constitution is modeled more closely after that of the United States than that of any other country. State rights have throughout been jealously preserved. Whereas in Canada everything not expressly given to the provinces went to the central Government, in Australia the central Government has power only in matters that are distinctly de-

fined in the Constitution. The Australian Senate consists of six members from each of the states, elected at the same election as the members of the lower house, but by all the electors of each state voting as one constituency except in Queensland, which is divided into two constituencies. The Representatives, elected in separate districts, will be kept down to double the numbers of the Senate. Members of both houses will be paid and will receive the same salary. Ministers in taking office do not vacate their seats, as in England. A measure that the House of Representatives has passed may be rejected by the Senate, and if brought before it in the succeeding session may be rejected again, after which the Government may dissolve both houses and order new elections. If the newly elected House of Representatives passes the same measure and the Senate again rejects it, then there is to be a joint session of both houses, in which the decision is made by a simple majority vote.

A constitutional amendment must first be passed by an absolute majority of both houses of Parliament, and then in not less than two or not more than six months be submitted in each state to the electors qualified to vote for members of the House of Representatives. If one of the houses of Parliament fails to pass the proposed amendment or makes an amendment to it to which the other will not agree, and if it is again passed by the former after three months in the same or the next session and it is again rejected by the other, the Governor General may submit it to the popular vote either with or without any amendments subsequently agreed to by both houses. The people shall vote in such manner as the Parliament prescribes; but until the qualification of electors becomes uniform throughout the commonwealth only half the votes shall be counted in states in which adult suffrage prevails. If in a majority of the states a majority of the electors approve of the proposed law, and if a majority of all the electors voting also approve, the proposed law shall be presented to the Governor General for the Queen's assent. No alteration diminishing the proportionate representation of any state in either house of the Parliament, or the minimum number of representatives of a state in the House of Representatives, or increasing, diminishing, or otherwise altering the limits of the state, or in any manner affecting the provisions of the Constitution in relation thereto, shall become law unless the majority of the electors voting in that state approve the proposed law.

Western Australia held out when the other colonies voted to join the federation, in the hope of securing special amendments in view of its undeveloped condition, such as differential railroad rates in favor of Western Australian coal and protective duties against the other colonies. After agreeing to railroad connection with South Australia without differential freight rates, the Western Australian Government still asked for the right to impose tariff duties, not to exceed the existing duties. The bill provided that the colony might tax imports from other colonies temporarily, the duties to be reduced by 20 per cent. a year until in five years they would disappear. Sir John Forrest, the Premier of Western Australia, asked for fiscal freedom for the five years, the other colonies to be equally free to tax Western Australian goods. To this the other Premiers would not agree, fearing that it might open the door for other amendments. The British Government, through which the request was presented to the Premiers, urged Western Australia to reconsider its attitude and take steps to enter the

federation as an original state. This Western Australia decided to do, and made arrangements to have a referendum taken previous to the proclamation of the commonwealth. The Parliament, summoned to a special session on May 17, decided to submit the bill as amended by the conference of Premiers to the people of Western Australia. The bill was passed on June 7, and the date of the referendum was fixed for Aug. 7. There were 44,704 affirmative and 19,691 negative votes. New Zealand sent a delegate to London to seek through the Imperial Government amendments to the bill providing for immediate action in organizing the common defense, giving New Zealand the right to take part at once in the Federal High Court, and reserving the right to join the commonwealth as an original state at any time within seven years. To these propositions the Premiers could not agree, replying to the inquiries of the Colonial Office that they had no authority to consent to amendments.

The British Colonial Secretary, Joseph Chamberlain, requested the several colonies to send delegates to explain and give assistance when the commonwealth bill should come before the Imperial Parliament. The Premiers agreed in conference that each colony should appoint a delegate, and that such delegates when appointed should represent all the federating colonies in unitedly urging the passage of the bill without amendment and in explaining any legal and constitutional questions that might arise. When the delegates arrived in London Mr. Chamberlain suggested several amendments to the draft constitution, in answer to which they signed a memorandum reciting their instructions to advocate the passage of the bill without amendment. Mr. Chamberlain, in dispatches to the several Australian governments, requested that the instructions be enlarged to enable the delegates to consider with the Colonial Secretary the form in which amendments might be made so as to render them acceptable to the Australian people. The Premiers declined to accept amendments, urging that the bill as it was embodied the Constitution desired by the Australian people, having been prepared by an elected convention and ratified by a referendum. The Secretary of State for the Colonies objected to the clause making the Federal High Court, instead of the Privy Council, the final court of appeal. He considered that an important link of empire would be impaired and divergency would spring up where in the general interests unity is most desirable. In interpreting the constitution and fixing the boundary between the powers of commonwealth and states the final decision, in his opinion, should lie with the highest tribunal of the empire, beyond suspicion of local bias or predilection. The Imperial Parliament could scarcely allow the Australian High Court to decide whether commonwealth laws, those affecting British shipping or laws on the fisheries, for instance, are *ultra vires*. Banking houses and commercial institutions that had investments in Australia had a strong feeling against the limitation to the right to appeal to the Privy Council. The objections to the existing imperial court of appeal would not hold against the new court which the Government proposed to create by amalgamating the judicial committee of the Privy Council with the House of Lords and providing for the adequate representation of the great colonies in the new court by calling into the House of Peers a number of colonial jurists. Another amendment upon which Mr. Chamberlain insisted was an express statement that the colonial laws validity act of 1865 will apply to laws of the commonwealth.

The question of the right of appeal from the Australian High Court to the Privy Council has been under discussion since the scheme of federation was discussed at the first meeting of the convention at Adelaide. When the Premiers visited England, on the occasion of the Queen's Jubilee in 1897, Mr. Chamberlain urged reconsideration. It was accordingly reconsidered at Melbourne, and finally the compromise contained in the bill was adopted. The Australians were unwilling to resign the right of having their Constitution interpreted by their own tribunal, and believed that by excepting cases in which the public interests of the United Kingdom or of other colonies were involved they conceded all that was necessary and right. But the term "public interests" seemed to the Colonial Secretary vague and indefinite. In the course of further discussion between the delegates and the Colonial Secretary, James R. Dickson, the Queensland delegate, separated himself from his colleagues and expressed himself in favor of accepting the proposed amendments in order to get the commonwealth bill passed as early as possible. Sir Julian Salomons, serving provisionally as delegate from New South Wales, approved the amendments for similar reasons. The Australian governments, however, contended that the right of deciding Australian constitutional questions should reside in the tribunals of Australia. After further conference Mr. Chamberlain arranged a compromise with the delegates, allowing the Executive Government to determine whether an appeal from the High Court to the Privy Council should be allowed. This proposal to confound executive and judicial powers was universally condemned in Australia. The Victorian delegate was superseded. The Government of Queensland asserted the right to leave to Parliament and people the decision whether they would accept a constitution into which such a principle was introduced. Further conferences between the delegates and the Secretary of State resulted in a new compromise, according to which interstate and constitutional questions shall be finally settled by the Federal High Court unless that tribunal rules that the question is one which ought to be settled by the Privy Council. Private litigants may carry their cases from the state Supreme Court either to the Federal High Court or to the Privy Council. If they desire to appeal from the decision of the High Court to the Privy Council they must obtain permission from the Privy Council. This amendment proved acceptable in Australia and was adopted by the British Parliament, though New South Wales, Victoria, Tasmania, and South Australia would have preferred the clause in the original draft, while Queensland and Western Australia objected to any restriction of the right to appeal to the imperial court, and New Zealand also desired the plenary right to appeal. The new clause runs as follows: No appeal shall be permitted to the Queen in Council from a decision of the High Court upon any question howsoever arising as to the limits *inter se* of the constitutional powers of the commonwealth and those of any state or states or as to the limits *inter se* of the constitutional powers of any two or more states, unless the High Court shall certify that the question is one which ought to be determined by her Majesty in Council.

The position taken by Mr. Dickson was approved by his Government, which had opposed from the beginning the restricting of the right of appeal to the Privy Council. Newspapers and commercial bodies in the other colonies sustained the view of the Imperial Government, and so did

the chief justices of all seven Australasian colonies. The Government of New Zealand protested against the transfer of the appellate jurisdiction from the metropolitan to the Australian authorities. The Premiers of New South Wales, Victoria, South Australia, and Tasmania, while pleading for the passage of the bill as it stood, did not question the constitutional right of the British Parliament to alter its provisions.

The bill was introduced in the British House of Commons by Mr. Chamberlain on May 15, with the amendments on which the Imperial Government insisted. The only alteration in the Constitution as drafted in Australia was the deletion of the entire clause restricting the right of appeal from the High Court to the Privy Council, and empowering the commonwealth Parliament to make further restrictions. The bill was altered so as to allow Western Australia to come into the federation as an original state, and an amendment was added which provides that, notwithstanding anything in the Constitution, the Queen's prerogative to grant special leave to appeal to the Privy Council may be exercised with respect to any judgment or order of the High Court of the commonwealth or the Supreme Court of any state.

The Earl of Hopetoun, born Sept. 20, 1800, who was Governor of Australia from 1889 to 1895 and since Lord Chamberlain, was appointed to be the first Governor General of the Commonwealth of Australia, and Jan. 1, 1901, was fixed for its proclamation, its inauguration to take place at Sydney, but the future capital to be determined by the Federal Parliament. The Federal Parliament, as is provided in the Constitution, will sit at Melbourne until the new seat of Government is fixed. It is to be placed within territory granted to or acquired by the commonwealth and vested in it, of not less than 100 square miles in area, situated in the state of New South Wales, but distant not less than 100 miles from Sydney. The representation in the Federal House of Representatives, as calculated for the five colonies that applied for federation, is as follows: New South Wales, 23 members; Victoria, 20; Queensland, 8; South Australia, 6; Tasmania, 5; total, 62 members.

New South Wales.—The Legislative Council contains 69 members, who are nominated for life by the Governor. The Legislative Assembly has 125 members, elected in separate districts by all males of full age who are qualified by a residence of twelve months in the colony. At the election of July 27, 1898, the number of electors registered was 324,338, which was 24.28 per cent. of the population; the number who voted was 178,717, which was 56.41 per cent. of the number registered in contested districts. The Governor, appointed in January, 1899, is Earl Beauchamp. The ministry at the beginning of 1900 was composed as follows: Premier and Colonial Treasurer, Sir William John Lyne; Chief Secretary, John See; Attorney-General, Bernhard Ringrose Wise; Secretary for Lands, Thomas Henry Hassall; Secretary for Public Works, Edward William O'Sullivan; Minister of Public Instruction and of Industry and Labor, John Perry; Minister of Justice, William Herbert Wood; Postmaster-General, William Patrick Crick; Secretary for Mines and Agriculture, John Lionel Fegan; Vice-President of the Executive Council, James Alexander Kenneth Mackay.

The new Cabinet has endeavored to show that the surpluses shown in G. H. Reid's budgets were fictitious, and that he left behind him an accumulated deficit of a million sterling. The expenditures are still increasing faster than the revenue,

and no surplus is anticipated until the new Federal tariff comes into force. In order that this shall be ample not only for revenue but for protection the New South Wales Protectionists are agitating for the adoption of the Victorian tariff, which is vaunted as a scientific one. The Parliament met on June 12. When the bubonic plague appeared at Sydney the city corporation showed itself incompetent to deal with the difficulty. Inspectors appointed by aldermen would not apply the sanitary laws when dealing with the premises of these aldermen or their supporters. Very soon the Government saw the necessity of taking the matter into its own hands, and its thorough work in sanitation led to the opinion that the public health should be taken from the corporation and placed in charge of a responsible Government department. The Government pulled down buildings and did other things that were illegal but effective as preventive measures. For these it obtained a bill of indemnity. The wharves and foreshore of the harbor, where the disease first appeared, were resumed by the state. A more thorough public health act was carried through Parliament. Another provided for the better government of Sydney. A bill dividing the country into the proper number of electorates was based on the report of a commission. A harbor trust was established. To replace guns sent to South Africa the Government purchased in England 4 4.7-inch naval guns fitted with carriages for field service, and several Vickers-Maxim guns. A bill was carried putting the volunteer force on a better footing. Various Government measures showed that the Labor party held the balance of power and was inclined and able to dictate to this Cabinet as effectually as it did to Mr. Reid's Cabinet. A bill was introduced giving municipalities power to raise their revenues by taxing the unimproved value of land. Another provides for the safe working of metalliferous mines, and establishes a fund for the relief of workers in case of death or accident. Eight hours is made the maximum day's labor. The Government also brought forward a measure establishing compulsory arbitration in labor disputes and one dealing with old-age pensions. A far-reaching measure provides for the purchase of large estates by the state in order to divide them up for the purpose of closer settlement. An early closing act passed in the preceding session was found to work badly, giving opportunities to some for evasion, while small suburban shops that have been accustomed to do most of their business after working hours suffered unduly. Changes in this law were proposed, and numerous subjects of minor importance were introduced for legislation, more than there was time to discuss. The advancement of public works was approved, especially light railroads, water conservation, and artesian wells.

Victoria.—The members of the Legislative Council, 48 in number, are elected for six years by citizens owning property worth £10 per annum or leasing property rated at £25 per annum. The members of the Legislative Assembly, 95 in number, are elected for three years by universal manhood suffrage. The number of electors for the Assembly enrolled in 1898 was 252,560. The Governor is Lord Brassey. The ministers in office at the opening of 1900 were the following: Premier and Chief Secretary, Allan McLean; Treasurer, W. Shields; Attorney-General, W. H. Irvine; Minister of Mines, Railways, and Water Supply, A. R. Outtrim; Minister of Public Works and Agriculture, G. Graham; Postmaster-General, W. A. Watt; Minister of Education and Customs, Carty Salmon; Minister of Lands, J. H. McColl;

Solicitor-General, J. M. Davies; Minister of Defense, D. Melville.

The Parliament was opened on June 27. Projected legislation included female franchise, old-age pensions, the state purchase of land for closer settlement, the establishment of a department of labor, and the prevention of the adulteration of wine. The expenditure for the year exceeded the estimate, but revenue increased in a greater ratio, leaving a surplus of £132,000. For the war in Africa £63,000 had been spent, and £20,000 of the surplus was required to send a naval contingent to China. Revenue for 1901 was estimated at £7,482,000 and expenditure just under that amount. For increased educational expenditure £19,000 would be required; for additional military expenses, £18,000; for old-age pensions, £25,000. The women in Victoria who are opposed to female suffrage started a movement on the lines of the American women's antisuffrage movement, and when the woman's suffrage bill was under discussion in Parliament they obtained many thousand signatures to a petition against the measure. The Government borrowed £500,000 for railroad purposes, obtaining the money in Melbourne at the price of 96½ for 3 per cent. debentures.

Queensland.—The Legislative Council contains 38 members, nominated by the Crown; the Legislative Assembly of 72 members is elected for three years by the ballots of male residents of six months' standing. The Governor is Lord Lamington. The ministry was composed of the following members at the beginning of 1900: Treasurer and Secretary for Mines, Robert Philp; Chief Secretary, James Robert Dickson; Secretary for Agriculture, J. V. Chetaway; Home Secretary, J. F. C. Foxton; Postmaster-General and Secretary for Public Instruction, George Drake; Secretary for Public Lands, W. O'Connell; Secretary for Railways and Secretary for Public Works, John Murray; Attorney-General, A. Rutledge; without portfolio, George Wilkie Gray and D. Dalrymple.

South Australia.—There is an elective Legislative Council of 24 members, one third of whom are replaced every third year. The House of Assembly has 54 members, elected for three years by the vote of adult citizens of both sexes whose names have been registered six months previous to the election. There were 151,143 qualified electors in 1898. The Governor is Lord Tennyson. The Cabinet at the beginning of 1900 was composed as follows: Treasurer and Premier, F. W. Holder; Chief Secretary, J. G. Jenkins; Attorney-General, J. H. Gordon; Commissioner of Crown Lands, L. O'Loughlin; Commissioner of Public Works, R. W. Foster; Minister of Education and Agriculture, E. L. Batchelor.

The Parliament was opened on June 14. Household franchise, early closing, the assessment of land values, local government, land consolidation and repurchase, factories, a graving dock for Port Adelaide, railroads, a company law, aborigines, and other subjects were brought forward by the Government for legislation. The proposal to give all householders votes for members of the Legislative Council did not obtain the consent of the Council, although an extension of suffrage was agreed to. Both houses passed an act disqualifying members of the Federal Parliament from sitting in the South Australian Parliament, and compelling members of the local Parliament to resign on taking seats in the Federal Parliament. A royal commission examined into the condition and prospects of village settlements started some time ago in South Australia, and reported that

the attempt to apply communistic principles in the management of these settlements has resulted in total failure. The settlers received Government advances amounting to £85,000, of which they have paid back only £9,465.

Western Australia.—The Legislative Council contains 24 members, who are elected for six years by householders and occupants of property; the Legislative Assembly of 44 members, who are elected by adult males who have resided six months in the district or who own or rent property. The Governor is Col. Sir Gerard Smith, who was appointed in 1895. The Cabinet at the beginning of 1900 was composed as follows: Premier and Colonial Treasurer, Sir John Forrest; Commissioner for Railways and Director of Public Works, F. H. Piessé; Commissioner of Lands, George Throssell; Minister of Mines, H. B. Le-froy; Attorney-General, Richard William Penne-father; Colonial Secretary, George Randell.

The people of the gold fields started an agitation in the beginning of 1900 for separation from the older part of the colony. They declared that they had been viewed with suspicion by the earlier settlers from the time when they began to come in upon the discovery of gold in 1892; and that, although they had converted what was looked upon as a worthless desert into the largest gold fields in the world, in which over £100,000,000 of English capital was invested, the older colonists persistently used the powers granted them under responsible government to the detriment of the people who had created this industry and settled and improved a country four times the size of Great Britain. At a conference of representatives from all the settlements east of 119° of latitude and south of 24° of longitude a demand for separation was carried almost unanimously, and a monster petition was sent to the Imperial Government, setting forth that although numbering over 80,000 persons, nearly half the population of the colony, they had only 3 members in the Legislative Council and 6 in the Assembly. This proportion would be changed, but in a very inadequate degree, by the redistribution act recently passed, increasing the Legislative Council to 30 and the Assembly to 50 members. Under the new law the gold fields have only 6 members in the Council and 10 in the Assembly. The Government in the last four years had spent, it was asserted, over six times as much on the coast districts as on the eastern part of the colony, had spent, in fact, all the money raised by loans, all the revenue of the coast district, and in addition half a million of the revenue collected from the gold fields. This statement was controverted by the delegate from Western Australia, who said that nearly all the revenue drawn from the gold fields had been expended there and some of the loan money as well. The residents of the eastern districts found fault also with the tariff by which food, clothing, and other necessities must pay duties for the benefit of the farmers and manufacturers of the coast. Differential railroad rates are paid on all that is brought to the gold mines and a progressive tax is levied on the value of ore sent away. Recently a dividend tax had been imposed. The people of the mining districts were denied their natural harbor of Esperance and a railroad line to the south coast. A petition for a referendum on the question of federation, in favor of which the gold fields were unanimous, had been rejected by the Legislative Council by a majority of 13 to 4, although the signatures of 18,000 voters of the eastern district had been re-enforced by 5,000 names from the coast. The petition to the Queen was signed by 26,000 persons. Mr. Chamberlain sug-

gested that under federation their complaints could be dealt with in Australia. The representatives of the Western Australian Gold Fields Reform League in London pointed out that the division of Western Australia into two colonies, which was the condition on which the British Parliament had granted self-government in 1890, could no longer be dealt with by the Imperial Government if federation became a fact. Mr. Chamberlain nevertheless declined to receive the deputation. A congress of workmen sitting at Perth called for the total exclusion of colored and other undesirable aliens from the future commonwealth. The Western Australian ministry induced the governments of the eastern colonies to consent to having the mail steamers call at Fremantle, although this lengthens the voyage a full day. Although the revenue of the colony for 1900 was only £1,875,395, a decline of nearly a third, the previous deficit was wiped out and a surplus was expected. The regular session of Parliament began on Aug. 15, a special session having been held to enable Parliament to authorize a referendum on the commonwealth bill. Federation having been approved, the Government petitioned to have Western Australia admitted into the commonwealth as an original state, and the Imperial Government took the necessary steps to have this colony included. The session was a short one because it was necessary to dissolve the Legislative Assembly in order that members might be elected under the extended franchise. Bills were discussed concerning municipalities, the public service, and conciliation and arbitration in industrial disputes. The Government desired to encourage immigration and the settlement of land. The farming population is so small that the colony is a large importer instead of an exporter of agricultural produce. The railroad company to which large strips of land had been granted retarded settlement by leaving the land unimproved. Nevertheless, under the liberal laws of the colony, land settlement is making progress. The tin and coal mines are being rapidly developed. The export of timber shows signs of improvement. Western Australian timber suitable for street pavements is in growing request in Europe. Railroad business has been very satisfactory, and the railroads in the gold fields are being duplicated. The Government did not ask Parliament to sanction public works of magnitude on account of the impending dissolution. The Coolgardie water scheme is nearing completion.

Tasmania.—The Legislative Council consists of 19 members, elected under a property qualification for six years; the House of Assembly of 38 members, elected for three years, also by a qualified franchise. The electors for the Council in 1899 numbered 9,466; for the House of Assembly, 34,528. The Governor since 1893 has been Viscount Gormanstown. The Cabinet was composed as follows at the beginning of 1900: Premier and Attorney-General, N. E. Lewis; Chief Secretary, G. T. Collins; Treasurer, B. S. Bird; Minister of Lands and Works, E. Mulcahy; without portfolio, F. W. Piessé. In Tasmania the imports in 1899 were £119,000 in excess of those of 1898, and the exports showed an increase of £774,000, the exports of minerals in particular having increased £590,000 in value. Deposits in savings and other banks and investments in Government bonds attest the growing wealth of the people. The Government closed its accounts for 1899 with a surplus of £72,500, the revenue having been £36,000 in excess of that of 1898. In 1900 a revenue of £1,040,000 was anticipated, and the expenditure was expected to amount to

£926,000. The deficiency in the public revenue, which six years ago amounted to £455,000, will probably be extinguished by 1901.

New Zealand.—The Legislative Council has 48 members, appointed formerly for life but since 1891 for seven years. The House of Representatives consists of 74 members, of whom 4 are Maoris, elected for three years by the suffrage of adult persons of both sexes who have resided a year in the colony. There were 339,230 registered electors in 1896, of whom 196,925 were men and 142,305 women. The Governor is the Earl of Ranfurly. The ministry was composed at the beginning of 1900 of the following members: Premier, Colonial Treasurer, Commissioner of Trade and Customs, Minister of Labor, and Minister of Defense, R. J. Seldon; Minister of Lands, Commissioner of Forests, and Minister in Charge of the Advances to Settlers Office, J. Mackenzie; Commissioner of Stamp Duties and Minister of Native Affairs, J. Carroll; Minister of Immigration, Minister of Education, and Minister in Charge of Hospitals and Charitable Aid, W. C. Walker; Minister of Public Works, Minister of Marine, and Minister in Charge of Printing Office, W. Hall-Jones; Minister of Justice, J. Thompson; Minister of Mines, A. J. Cadman; Colonial Secretary, Postmaster-General, Telegraph Commissioner, Minister of Railways, and Minister of Industries and Commerce, J. G. Ward. On Jan. 25 Mr. Thompson and Mr. Cadman retired and James McGovern took both their portfolios.

The session of Parliament began on June 22. The general prosperity of the colony and the increasing volume of its exports are attributed to the policy of securing the acquisition of lands for close settlement more than to any other cause. The colonies of Australia are adopting the same policy. The granting of pensions to deserving aged persons is pronounced by the Government so great a boon to old colonists requiring assistance that there is no intention of repealing the law. The buoyancy of trade has added largely to the revenue raised by indirect taxation, but the ministers deem it advisable to reduce the customs duties levied on necessities of life. With increased revenues New Zealand is able to undertake military expenditure on an unprecedented scale. By such activity it is sought to impress the mother country with its ability to aid in extending the British flag over the unclaimed islands in the Pacific, and perhaps to take some of them into its own jurisdiction. The New Zealand contingent was the first of the colonial forces to arrive in South Africa. Four other bodies of troops were sent, making in all the largest contribution in proportion to population of any of the British colonies. To meet the cost of these contingents and of other measures designed to place the defenses on a safer and more satisfactory footing a large increase in the vote for defense was necessary. The establishment of a fully equipped reserve force for imperial and colonial purposes was proposed to the Imperial Government. Mining in New Zealand is more active than it has been for a long time. The largest yield of gold in a quarter of a century was obtained in 1899. The output of the coal mines is also increasing. The improvement in machinery for alluvial mining has been the means of giving employment to a large number of men. On July 3 J. Mackenzie resigned the Ministry of Lands and Agriculture. He was succeeded by Thomas Duncan. The Premier and Colonial Treasurer announced a surplus for 1900 of £605,000, exceeding all previous records. The revenue amounted to £5,700,000, not including a balance of £45,000

from the previous year, and expenditure was £5,140,000. Customs exceeded the estimate by £127,000, railroads by £146,000, stamps by £61,200, and territorial revenue by £24,200. Large areas of land were acquired for settlement during the year at a cost of £370,000, and £100,000 had been loaned to public bodies. The land tax produced £294,000 and the income tax £128,000. The public debt increased £900,000 during the year, but two thirds of this yields interest, making it no burden on the taxpayers. The expenditures for 1901 were estimated at £5,441,000. Of the excess of £301,000 over expenditures for the preceding year £95,000 were required to pay for the troops in South Africa. The cost of equipping the defense forces and volunteers also largely increased the expenditure. To extend the public schools into outlying districts and to establish a system of technical education it was necessary to augment the vote for educational purposes, which would be £462,000. The sum of £140,000 was required for surveys in connection with the close settlement of lands. Notwithstanding the large expenditures it was decided to reduce the customs duties by making mining, agricultural, dairy, and dredging machinery, engines, and boilers free, involving the sacrifice of £157,000. Penny postage within and without the colony was voted, to begin on Jan. 1, 1901, entailing a loss of £80,000 in revenue. Concessions in freight and passenger rates on the railroads cost £70,000 more.

Fiji.—The Fiji Islands, which have been a British possession since 1874, are administered by a Governor, who is also High Commissioner and Consul General for the Western Pacific. Sir G. T. M. O'Brien holds the office at present. The Legislative Council is composed of the 6 principal officials and 6 other members appointed by the Crown. Five of the provinces into which the colony is divided have European commissioners and 12 others are left in charge of the native chiefs.

British New Guinea.—The southeastern part of the island of New Guinea, with the D'Entrecasteaux and Louisiade groups, was proclaimed a British possession after the Germans had occupied the northeastern part. Queensland guaranteed £15,000 a year to pay the cost of administration, and subsequently New South Wales and Victoria agreed to share the expense. The Lieutenant Governor, who administers the Government, is George Ruthven Le Hunte. The revenue, derived mostly from customs, was £10,300 in 1898. For 1900 the revenue was estimated at £12,500 and expenditure at £27,000. The area under British rule is about 90,540 square miles, with 350,000 inhabitants. There are 250 European traders and missionaries, besides 300 or more gold miners, on the Louisiade Islands, Woodlark island, and the mainland. The value of the imports in 1898 was £46,971. They consist of food and tobacco, cloth, and hardware. Copra gathered by the natives from natural cocoanut groves, trepang, pearls, pearl shells, sandalwood, and gold are exported. The total value of the exports in 1898 was £49,859. Gums, rattan, ebony, and other cabinet woods and the cocoanut and sago palms are abundant. The acquisition of land by whites was not permitted until in September, 1899, the British Government made arrangements to grant large tracts to a syndicate, which proposed to sell to settlers at 2s. 6d. an acre for agricultural, and 1s. for pastoral, land. The colonial governments objected strongly to this grant, and the arrangement was consequently made conditional on their approval.

AUSTRIA-HUNGARY, a dual monarchy in central Europe, composed, under the fundamental law of Dec. 21, 1867, of the Empire of Austria and the Kingdom of Hungary, inseparable constitutional monarchies, hereditary in the male line of the dynasty of Hapsburg-Lorraine or, in the event of the extinction of the male line, in the female line. The legislative power for affairs common to both monarchies—viz., foreign relations, military and naval affairs, with the exception of the national territorial armies, common finance, commercial and railroad affairs concerning both monarchies, the customs tariff, the coinage, and the administration of the occupied provinces of Bosnia and Herzegovina—is exercised by committees of the legislative bodies of both monarchies. These committees, which are called the Delegations, meet alternately in Vienna and Buda-Pesth, the two capitals. They are composed of 20 members elected annually by each of the two upper houses and 40 from each of the lower houses. The Austrian and Hungarian Delegations meet and vote separately, and in case of disagreement they decide the question by a joint vote. The common ministers are responsible to the Delegations, and may be impeached for any dereliction of duty.

The Emperor of Austria and King of Hungary is Franz Josef I, born Aug. 18, 1830, proclaimed Emperor of Austria on Dec. 2, 1848, when his uncle Ferdinand I abdicated in consequence of a revolutionary uprising, and he was crowned King of Hungary on June 8, 1867, when the ancient constitutional rights of that monarchy were restored. The heir apparent is the Emperor-King's nephew, the Archduke Franz Ferdinand, born April 21, 1865, son of the late Archduke Karl Ludwig and the Princess Annunziata, daughter of the former King of Naples.

The ministers for the whole monarchy at the beginning of 1900 were as follow: Minister of Foreign Affairs and of the Imperial House, Graf Agenor Maria Adam Goluchowski; Common Minister of War, Gen. Edmund, Freiherr von Krieghammer; Common Minister of Finance, Benjamin de Kallay.

The Common Budget.—The cost of the administration of common affairs is borne by the two halves of the monarchy in proportions settled by an agreement between the Austrian Reichsrath and the Hungarian Parliament. The ten years' *Ausgleich*, as the agreement is called, was not renewed when the last period expired in 1897, and pending negotiations for a new one the provisions of the last *Ausgleich* were continued as a *modus vivendi*. A compromise was reached in November, 1899, in accordance with which Hungary will pay 34.4 per cent. of the common expenditure and Austria 65.6 per cent. The Hungarian quota is 3 per cent. more than under the old *Ausgleich*, and the duties paid by Hungary are reduced in the new commercial treaty so that the burden is about the same in proportion as before. The compromise will run till Jan. 1, 1910, or three years longer than the treaty. Hungary pays her share of the interest and sinking fund of the debt of the empire contracted prior to 1868. Since then no common debt has been contracted except the paper currency, which is guaranteed jointly. The common expenditure in 1897 was 171,285,000 florins, of which 62,267,000 florins were receipts from customs and the contributions of Austria and Hungary were 74,786,000 and 34,232,000 florins respectively. The preliminary accounts for 1898 make the total revenue and expenditure 180,541,000 florins, of which 71,147,000 florins came from customs and the two monarchies contributed respectively 75,044,000 and 34,350,000 florins. According to the

sanctioned estimates for 1899, the total was 156,857,000 florins, 57,139,000 florins being derived from customs, 75,952,000 florins from the Austrian and 34,766,000 florins from the Hungarian contribution. The budget estimate for 1900 was 172,324,750 florins, customs yielding 62,475,045 florins; receipts of the Ministry of Foreign Affairs, 181,047 florins; Ministry of War and Marine, 4,450,339 florins; Ministry of Finance, 40,556 florins; Board of Control, 6,367 florins; contributions of the two halves of the monarchy, 105,171,352 florins. The expenditure of the Ministry of Foreign Affairs is 5,059,618 florins, 4,958,471 florins for ordinary and 101,147 florins for extraordinary purposes; for the army, 145,280,352 florins, 134,593,038 florins for ordinary and 10,687,264 florins for extraordinary purposes; for the navy, 19,733,250 florins, 12,778,025 florins for ordinary and 6,955,225 florins for extraordinary purposes; Ministry of Finance, 2,102,300 florins; Board of Control, 149,230 florins.

Of the general debt, contracted before Dec. 24, 1867, the amount outstanding in July, 1899, was 2,722,549,875 florins. The annual payments for interest and amortization amounted to 126,274,590 florins, of which 95,963,877 florins fell to the share of Austria and 30,310,713 florins to the share of Hungary. The floating debt amounted to 162,163,201 florins, of which 112,680,650 florins represent paper money guaranteed by both monarchies, 14,480,951 florins Austrian paper money, and 35,001,600 florins Austrian salt mine obligations.

The revenue of Bosnia and Herzegovina for 1900 was estimated at 20,827,440 florins, and expenditure at 20,763,184 florins.

The Army.—The common army is organized in 15 army corps of 2 divisions, or 4 brigades, of infantry, 1 brigade of cavalry, 1 brigade of artillery, and 1 section of train. The common army has a supplementary reserve, to which young men not drawn for three years' active service are transferred. The Austrian Landwehr and the Hungarian Honved, constituting the special national armies of the two monarchies, have also their supplementary or Ersatz troops, which are drafted into the respective armies in case of war. Young men who have received a gymnasium education are required to serve only one year in any of the armies. The annual recruit for the common army is 103,100 men, of which number Austria supplies 59,211 and Hungary 43,899. For the Austrian Landwehr the yearly contingent is 10,000; for the Honved, 12,500. The total peace strength of the military forces in 1899 was 26,454 officers and 335,239 men, of whom 3,597 officers and 2,730 men were attached to the general staff, 1,697 officers and 7,153 men were serving in military establishments, 10,447 officers and 178,138 men belonged to the infantry of the common army, 1,890 officers and 45,906 men to the cavalry, 1,647 officers and 25,586 men to the field artillery, 422 officers and 7,786 men to the fortress artillery. 584 officers and 9,935 men to the pioneers, 79 officers and 2,964 men to the sanitary troops, 417 officers and 3,309 men to the train, 2,415 officers and 22,949 men to the Landwehr infantry, 246 officers and 2,119 men to the cavalry of the Landwehr, 2,587 officers and 22,312 men to the Honved infantry, and 426 officers and 4,346 men to the Honved cavalry; total, 361,693 officers and men, with 63,382 horses and 1,048 guns.

The war strength of the Austro-Hungarian army is 45,238 officers and 1,826,940 men, with 281,886 horses and 1,864 field guns. The general levy or Landsturm is estimated at 4,000,000 men. Military service in the national armies, as well as in the common army, begins at the age of twenty-one, and in the common army lasts ten years, viz.,

three years in the line and seven years in the reserve; in the Landwehr or Honved the period is twelve years. All who are not in the common army or the special armies or their reserves are liable to be called out for service in the Landsturm from the age of nineteen to that of forty-one, but only by command of the Emperor, and not to serve outside the national border except by parliamentary sanction.

The Navy.—The Austro-Hungarian navy, which is kept in a high state of efficiency for defensive purposes, will consist when completed of 15 armor clads of 6,000 to 9,000 tons, 7 cruisers of 4,000 to 7,000 tons, 7 third-class cruisers of 1,500 to 2,500 tons, 15 torpedo gunboats, and 90 torpedo craft of various sizes, exclusive of the monitors and torpedo boats kept in the Danube. The ships already built include 8 armor clads, 2 armored cruisers, 3 second-class and 8 third-class cruisers, 19 coast-defense vessels, and 32 first-class, 31 second-class, and 8 third-class torpedo boats. There were building on Jan. 1, 1900, 2 first-class battle ships of 8,300 tons and 2 second-class cruisers. The most powerful vessels previously constructed are the *Monarch*, *Wien*, and *Budapest*, of 5,000 tons, with Harveyized steel side armor 10.6 inches thick and gun protection, the armament consisting of 4 9.4-inch guns, 6 quick-firing 5.9-inch guns, and 14 small quick firers. The armored cruiser *Karl VI*, of 6,100 tons, has armor of the same thickness and carries 2 9.4-inch guns, 8 quick-firing 5.9-inch guns, and 18 small quick firers, and is capable of steaming 20 knots, while the new battle ships can make 17 knots.

Navigation.—The number of vessels entered at the ports of Austria during 1897 was 105,146, of 12,134,468 tons; cleared, 104,902, of 12,123,554 tons. Of the vessels, 88 per cent. were Austrian; of the tonnage, 90 per cent. was Austrian. At Hungarian ports, 19,190 vessels, of 2,016,484 tons, were entered and 19,174, of 2,012,945 tons, cleared during 1898. Of the vessels 83 per cent. and of the tonnage 63 per cent. were Hungarian.

The Austrian shipping on Jan. 1, 1898, comprised 189 merchant vessels engaged in ocean commerce, of 168,038 tons; 1,452 coasting vessels, of 21,085 tons; and 10,033 fishing and other vessels, of 21,423 tons; total, 11,674 vessels, of 210,546 tons, of which 175, of 142,310 tons, were steamers. The Hungarian merchant navy on Jan. 1, 1899, numbered 66 ocean-going vessels, of 56,889 tons; 158 coasting vessels, of 5,456 tons; and 277 fishing craft, of 432 tons; total, 501 vessels, of 62,777 tons, of which 69 were steamers, of 43,869 tons.

Commerce and Production.—The total value of the special imports into the Austro-Hungarian customs territory, in which Bosnia and Herzegovina are included, amounted in 1899 to 790,300,000 florins, and the total value of exports was 928,400,000 florins. In 1898 the total for imports was 819,800,000 florins; exports, 928,400,000 florins. The chief imports in 1898 were cotton, of the value of 52,814,000 florins; coal, 40,552,000 florins; wool, 39,400,000 florins; maize, 30,178,000 florins; tobacco, 25,556,000 florins; coffee, 22,468,000 florins; silk, raw and manufactured, 21,682,000 florins; wheat, 19,840,000 florins; wine in casks, 17,406,000 florins; flax and jute, 16,991,000 florins; rye, 15,501,000 florins; eggs, 14,153,000 florins; books and prints, 13,212,000 florins; copper, 11,765,000 florins; machinery, 9,132,000 florins; tallow, 8,263,000 florins; hides and skins, 7,693,000 florins; hogs, 6,464,000 florins. The chief exports were lumber and wood manufactures, of the value of 76,754,000 florins; sugar, 67,056,000 florins; eggs, 30,998,000 florins; barley, 30,204,000 florins; lignite, 29,373,000 florins; malt, 24,288,000 florins;

leather gloves and shoes, 24,178,000 florins; cattle, 18,506,000 florins; horses, 17,467,000 florins; colored glassware, 11,006,000 florins; bed feathers, 9,295,000 florins; woolens, 8,801,000 florins; cask staves, 8,671,000 florins; hops, 7,870,000 florins; beans, 7,301,000 florins; beer in casks, 6,997,000 florins; fowls, 6,990,000 florins; coal, 6,719,000 florins.

The distribution of the special commerce in 1898 is shown in the following table, giving the imports from and the exports of domestic merchandise to the principal countries, in Austrian florins:

COUNTRIES.	Imports.	Exports.
Germany.....	282,421,000	420,452,000
Great Britain.....	69,369,000	75,195,000
Italy.....	50,241,000	57,981,000
Russia.....	68,218,000	82,181,000
United States.....	67,189,000	14,454,000
Roumania.....	38,359,000	32,958,000
British India.....	42,164,000	16,455,000
Switzerland.....	25,068,000	32,038,000
France.....	24,441,000	27,170,000
Turkey.....	17,158,000	31,050,000
Servia.....	17,159,000	11,022,000
Belgium.....	15,405,000	5,781,000
Brazil.....	18,266,000	1,806,000
Netherlands.....	8,744,000	10,164,000
Egypt.....	7,480,000	11,018,000
South America.....	11,828,000	2,082,000
Greece.....	7,990,000	5,572,000
Dutch India.....	11,651,000	183,000

The imports of precious metals in 1898 were 23,409,000 florins; exports, 60,950,000 florins.

In Austria about half the people are engaged in agriculture. Rye, barley, oats, potatoes, beets, pulse, maize, and buckwheat are the principal crops. The vineyards produced 4,224,000 hectolitres of wine in 1898. The production of coal in 1898 was 41,142,000 florins in value; of lignite, 43,493,000 florins; of pig iron, 34,303,000 florins; of lead, 1,790,000 florins; of quicksilver, 1,149,000 florins; of zinc, 1,759,000 florins; of silver, 1,885,000 florins; of copper, 628,000 florins. The total value of minerals raised was 94,870,874 florins; of metals extracted, 42,453,595 florins. There were 9,827,503 hectares under forest, of which 6,828,415 hectares are pine. The breweries produced 9,060,498 hectolitres of beer in 1897, the distilleries 1,373,831 hectolitres of alcohol.

Of the Hungarian people, 62 per cent. are employed in the cultivation of the soil. Wheat, maize, rye, barley, pulse, and potatoes are the principal crops. The forest area is 7,515,490 hectares, of which 3,714,590 hectares are beech woods, 2,082,834 hectares oak, and 1,718,066 hectares pine. The value of the mineral products in 1898 was 26,027,981 florins, of which 14,022,406 florins represent lignite, 6,569,194 florins coal, and 4,527,387 florins iron ore. The smelted metals were valued at 20,027,981 florins, 18,676,019 florins representing pig iron, 4,538,524 florins gold, which is found associated with silver, lead, and copper, and 1,104,513 florins silver. The special commerce of Hungary for 1898 amounted to 597,169,000 florins for imports and 551,895,000 florins for exports. The chief imports are cottons, woolens, clothing, silks, wine, sugar, and coffee. The grain exported was valued at 97,470,000 florins; flour, 82,925,000 florins; live animals, 69,965,000 florins; timber and forest products, 39,057,777 florins; wine, 15,177,000 florins; eggs, 11,278,000 florins; wool, 7,750,000 florins; cask staves, 6,804,000 florins. Of the total imports, raw materials constituted 26 per cent., and of the exports, 58 per cent. From Austria came 75 per cent. of the imports, and 74 per cent. of the exports were shipped to Austria.

Railroads, Posts, and Telegraphs.—The state railroads of Austria had in 1898 a total

length of 4,700 miles; lines belonging to companies and operated by the Government, 1,200 miles; lines owned and operated by companies, 4,862 miles; total length, 10,822 miles. The total capital expenditure was £231,522,000 sterling. The number of passengers carried in 1897 was 118,638,000; tons of freight, 103,271,000; receipts, 278,053,000 florins; expenses, 172,434,000 florins.

The state railroad lines in Hungary had on Jan. 1, 1899, a length of 4,876 miles; companies' lines operated by the Government, 3,439 miles; lines owned and worked by companies, 1,822 miles; total length, 10,137 miles. The total capital expenditure was £107,306,000 sterling; number of passengers carried in 1898, 60,312,000; tons of freight, 38,624,000; receipts, £10,576,000 sterling; expenses, £5,730,000 sterling.

The Austrian post office in 1898 carried 876,556,080 letters and postal cards, 122,886,840 samples and books, and 97,400,800 newspapers.

The Hungarian postal traffic in 1898 was 250,802,000 letters and postal cards, 41,096,000 samples and book packets, 18,964,000 money and postal orders of the aggregate amount of £43,382,000 sterling, 18,155,000 parcels and money letters, and 108,752,000 newspapers.

The telegraph lines of the Austrian Government had in 1898 a total length of 32,363 miles, with 96,580 miles of wire. The number of messages sent during 1898 was 14,158,226. The length of telephone wires was 64,380 miles. The postal and telegraph receipts amounted to £44,650,851 sterling; expenses, 40,705,717 florins.

The Hungarian Government lines had a total length of 13,675 miles, with 66,689 miles of wire; number of messages, 13,583,618. The length of telephone wires was 20,361 miles. The postal and telegraph receipts in 1898 were £1,706,300 sterling; expenses, £1,274,700.

Austria.—The legislative authority for the empire is vested in the Reichsrath, but each province possesses a large measure of autonomy and has a Landtag, or Diet, to legislate on all matters not reserved by the Constitution for the Reichsrath. The upper house of the Reichsrath is the Herrenhaus, composed of 19 archdukes, 67 hereditary territorial nobles, 10 archbishops, 8 prince bishops, and 136 life members nominated by the Emperor for distinguished services or eminence in the arts or sciences. The lower house is the Abgeordnetenhaus, containing 85 representatives of the landed proprietors, 118 representatives of boroughs and cities, 21 representatives of chambers of commerce and industry, 129 representatives of rural districts elected indirectly by the peasants and small proprietors, and 72 members elected directly by the people; total, 425 members. All males over twenty-four years of age who pay 4 florins in direct taxes or possess educational or other qualifications are entitled to vote directly for Deputies in the towns and in the rural constituencies for electors who choose the Deputies, each elector representing 500 individual voters. The Austrian Ministry in the beginning of 1900, constituted Oct. 2, 1899, consisted of the following members: President of the Council and Minister of Agriculture, Graf Clary und Aldringen; Minister of National Defense, Graf Zeno Welser von Welsersheimb; Minister of Railroads, Ritter von Wittek; Minister of the Interior, Dr. E. von Körber; Minister of Justice, Eduard Ritter von Kindinger; Minister of Worship and Education, Dr. W. Ritter von Hartel; Minister of Finance, Dr. S. Kniazolucki; Minister of Commerce, Dr. Friedrich Stibral; without portfolio, Dr. C. Ritter von Chiedowski.

Area and Population.—The area of Austria is 115,903 square miles. The population at the cen-

sus of Dec. 31, 1890, was 23,895,413. The number of marriages in 1898 was 199,723; of births, 949,398; of deaths, 635,341. The number of emigrants from both Austria and Hungary in 1897 was 37,224, of whom 32,033 were destined for North America, 3,166 for Brazil, and 1,485 for the Argentine Republic. In 1898 the Austrian immigration into the United States was 23,138; in 1899 it was 41,571. Vienna, the capital, contained 1,364,548 inhabitants at the last census.

Finances.—The revenue of the Austrian Government in 1897 was 908,397,000 florins and the expenditure 868,214,000 florins. For 1899 the revenue was estimated at 1,521,509,668 crowns, or half florins, and the expenditure at 1,520,573,586 crowns. For 1900 the estimate of revenue was 1,585,811,822 crowns, credited to the following sources: Reichsrath and Council of Ministers, 1,523,200 crowns; Ministry of the Interior, 2,866,042 crowns; Ministry of Defense, 852,812 crowns; Ministry of Worship and Education, 13,064,068 crowns; Ministry of Finance, 1,140,780,938 crowns; Ministry of Commerce, 111,489,840 crowns; Ministry of Railroads, 272,528,500 crowns; Ministry of Agriculture, 31,708,654 crowns; Ministry of Justice, 2,211,538 crowns; pensions, 2,824,880 crowns; subventions and dotations, 667,600 crowns; imperial debt, 2,417,180 crowns; debt administration, 19,600 crowns; sales of state property, 311,000 crowns; payment by Lombard railroads, 1,646,000 crowns. The estimated expenditures for 1900 were 1,586,403,933 crowns in the aggregate, distributed under various heads as follows: Imperial household, 9,300,000 crowns; imperial chancery, 160,183 crowns; Reichsrath, 2,601,602 crowns; Supreme Court, 48,884 crowns; Council of Ministers, 2,748,222 crowns; Austria's contribution to common expenditure, 260,831,992 crowns; Ministry of the Interior, 60,618,070 crowns; Ministry of Defense, 54,174,542 crowns; Ministry of Worship and Education, 75,275,182 crowns; Ministry of Finance, 258,705,876 crowns; Ministry of Commerce, 111,617,470 crowns; Ministry of Railroads, 228,399,460 crowns; Ministry of Agriculture, 40,167,435 crowns; Board of Control, 416,000 crowns; pensions, 53,243,556 crowns; subventions and dotations, 15,484,250 crowns; imperial debt, 344,030,004 crowns; debt administration, 1,557,040 crowns.

The extraordinary expenditure for permanent purposes in 1900 was estimated at 67,829,400 crowns, of which only 1,149,100 crowns were on hand, leaving 66,680,300 crowns to be raised by a loan at 3½ or 4 per cent. The Austrian imperial debt on June 30, 1899, amounted to 1,612,637,421 florins, not including a floating debt of 15,164,567 florins. The annual charge for interest and amortization was 74,796,806 florins.

Political Affairs.—The disturbances incident to the conflict between the Germans and the Czechs in the autumn of 1899 led to the retirement of the Thun ministry and the formation of a Ministry of Affairs under Graf Clary, who in turn resigned in order to let Dr. Wittek form a Cabinet with the special mission of carrying out by imperial decrees in virtue of the fourteenth article in the Constitution those measures of urgent state necessity that could not be got through the Reichsrath. The Emperor warned Dr. Stransky and other Czech leaders that popular agitation must cease and threatened to proclaim a state of siege. The Czechs demanded that their language be used in commanding Bohemian regiments, but the Emperor made it clear to them that the language of the army must remain German. Bohemian soldiers who answered the roll call in their native tongue were severely punished. On Jan. 19 a new ministry was formed

with the mission of seeking a working compromise between the conflicting nationalities. It was composed as follows: President of the Council and Minister of the Interior, Dr. Körber; Minister of Railroads, Dr. von Wittek; Minister of Finance, Dr. Böhm von Bawerk; Minister of National Defense, Field-Marshal Graf Zeno von Welsersheimb; Minister of Agriculture, Councilor Giovanelli; Minister of Justice, Baron Spreng von Booden; Minister of Commerce, Baron Call von Kulmbach-Rosenburg; Minister of Public Instruction and Worship, Dr. von Hartel; without portfolios, Dr. Rezek and Dr. Pietak. The parliamentary leaders of the Czech and German parties professed to be alike eager for an understanding, and as soon as the new Cabinet took office a conference of representatives of the two nationalities was summoned to discuss a project submitted by the Government as the basis of an agreement. The Reichsrath reassembled on Feb. 22 before the nationality conference had led to any definite result. The Young Czechs determined to continue their obstructionist tactics, reserving for themselves the proper moment for putting them into practice. The object in convoking the Reichsrath before the conference completed its work was to obtain the vote for the annual contingent of recruits. The German Clericals and the Poles declared against obstruction. The Prime Minister threatened to dissolve the Reichsrath if it proved still unmanageable. The programme of the new Cabinet contained urgent and popular reform measures on which all nationalities were in agreement. Whether the conference reached a settlement of the language question or failed to reach one, the Government was determined to bring in a bill on the subject. In the economic field the Government proposed the construction of 6 railroads, costing 480,000,000 crowns, in the space of seven or eight years, also to extend the harbor at Trieste and to regulate the navigable rivers. Measures were promised for the promotion of industry and the export trade, and a series of reforms affecting the working classes as well as the industrial and commercial community. The question of the legislative regulation of the hours of labor and conditions of work in the mines would receive careful consideration, a commission having been appointed to examine into the subject. A coal strike going on in Bohemia and Moravia impelled the Social Democrats and some of the German factions to bring the subject forward, and the Government agreed to introduce the eight-hour day in some of the state mines. The Reichsrath voted for the annual contingent of recruits and elected the Austrian Delegation without a hitch. The language conference, which closed its labors on March 22, achieved a temporary truce between the nationalities sufficient to insure the resumption of its normal activity by the Reichsrath. The military authorities decided to lighten the burden of military service for citizens residing abroad and engaged in advancing the export trade of the monarchy. The promotion of manufactures and exports is a subject that has engaged the attention of Austrian statesmen in recent years, and proposals for sending colonists as well as commercial agents to Turkish dominions and to Africa, and even of seeking spheres of influence in China and elsewhere, have been put forward. While excelling Germany and England and rivaling France in some classes of fine handiwork of artistic quality, Austria has been far outstripped by Germany in wholesale production by machinery, although possessing all the natural resources and mechanical aptitude. No actual settlement of the language question was brought about through the conference, and after it separated the extreme partisans on both sides

assumed a more irreconcilable attitude than ever. The Czechs, who numbered 60 in the Reichsrath and had as allies the Slovenes, the feudal nobility of Bohemia, and other factions counting 30 to 40 votes, renewed their threat of obstruction. The Young Czechs were a small minority when the Old Czechs came to an understanding with the Taaffe ministry and accepted the proffered compromise on the language question, but this minority repudiated the agreement, and in the next elections they routed the moderate party and reduced the compromise to a dead letter. With the 4-gulden franchise in force, the ministry of Dr. Körber had to face the contingency, in the event of a dissolution, of seeing not only the Radical Czechs, but the Radical Germans coming into the new Reichstag in greater strength and more violent and uncompromising than before, which would compel a new dissolution and probably the restriction of the franchise by executive decree. Some of the differences of minor importance were disposed of in the conference of the nationalities, but in essential matters the two parties were as far apart as ever. When the Reichsrath met on May 8, after the recess, Dr. Körber introduced two language bills, one for Bohemia and one for Moravia, which met with an indifferent approval from the Germans, but were rejected without hesitation by the Czechs. The Prime Minister called attention to the financial difficulties of the country. The surpluses which former ministers obtained by means of fresh taxes had fallen off, while the cost of administration had risen, and the expenditure for common affairs, particularly for the army, had largely increased. The stagnation of the empire at a period when other states were progressing in prosperity and power was attributable to the struggle of the nationalities during the past three years, which had produced a situation that was deplored by all Austrians and friends of Austria and was gratifying only to the enemies of Austria. Dr. Pacak, one of the Czech leaders, announced the intention of his party to resort to obstruction to prevent the passage of the bills, the Czechs believing it to be outside of the constitutional powers of the Reichsrath to impose such measures on the provinces. He then put forward a formal motion for a roll call, which was followed by others till the house adjourned for lack of a quorum. The Czech representatives were driven to take the course they did by their party, and they received no encouragement from Russian Pan Slavists nor support from the Poles or the German Clericals who have at other times been their allies. When the Reichsrath reassembled, after a recess on June 6, the obstruction was resumed. The ministers, not being party men or members of Parliament, had no strong support in their effort to break the deadlock. The Germans, who themselves resorted to obstruction in dealing with the Badeni Cabinet and wish to preserve the weapon for their future use when they think such parliamentary tactics opportune, were reluctant to take a decided stand against its use by their adversaries. The Emperor demanded in authoritative tones that Parliament should work, but the Czechs disregarded his intimation. The whole time of the sittings was taken up with dilatory motions and petitions. On June 8 the Czechs resorted to more violent obstruction to prevent an amendment of the rules of procedure. Such a din was raised with trumpets, cymbals, whistles, and even saucepans and trays brought from the restaurant that discussion was impossible. Detachments of 15 members relieved each other in keeping up the intolerable noise far into the night. The ministers held a council and consulted the sovereign, with

the result that the Prime Minister announced the close of the session. With its ending the parliamentary immunity of members for any excess of language in political manifestations was suspended. The most influential of the Young Czech leaders disclaimed any ambition to make Bohemia a completely autonomous state, but insisted that the Czech nationality should be preserved not alone in the interests of justice, but in that also of the preservation of Austria; for if the empire were to become a German state its absorption by Germany would eventually become inevitable; on the other hand, the oppression of German Austrians would lead to a conflict with the powerful German Empire. A restricted autonomy was therefore desirable, by which each nationality would be able to promote the material strength of the empire by its own free national and economic development, and such a solution should be the result of a compromise between the two nationalities. In the Austrian Delegation the Czech representatives vehemently assailed the foreign policy of Graf Goluchowski in an unprecedented manner, and called in question the strength and durability of the triple alliance and its value to Austria, as they had done before. The ministers assured them that the alliance, which was purely for peace and defense, is as substantial as it was twenty years ago; that Italy was not tired of it or ruined by it; and that a story of Austria having proposed to annex Bosnia and Herzegovina definitely and of Italy's having threatened in that event to occupy Albania was void of foundation.

Hungary.—The Hungarian Parliament legislates for Hungary, and in matters of common concern for Croatia and Slavonia also, but for provincial affairs they have their separate Diet of 90 members elected for five years. The Hungarian Parliament consists of two chambers—the House of Magnates and the House of Representatives. The upper house is made up of 18 archdukes, 44 archbishops, bishops, and other Roman Catholic and Greek Catholic dignitaries, 12 ecclesiastical and lay representatives of the Calvinistic and Lutheran confessions, 226 Hungarian princes, counts, and barons who pay a minimum land tax of 3,000 florins, 17 judges and other official members, 77 life peers nominated by the King or elected by the House of Magnates, and 3 delegates of Croatia-Slavonia. To entitle a citizen to vote for members of the lower house a low tax qualification is necessary, excepting for the professional and learned classes. One out of every 18 persons has a vote. The House of Representatives contains 453 members, including 40 delegates of Croatia and Slavonia.

The Cabinet of Ministers in the beginning of 1900, constituted Feb. 26, 1899, was composed of the following members: President of the Council, Coloman de Szell; Minister of Finance, Dr. Ladislaus de Lukacs; Minister of National Defense, Baron Geza Fejervary; Minister near the King, Count Emanuel Szecheny; Minister of the Interior *ad interim*, Coloman de Szell; Minister of Education and Worship, Dr. Julius de Wlassics; Minister of Justice, Dr. Alexander Ploesz; Minister of Industry and Commerce, Alexander de Hegedus; Minister of Agriculture, Dr. Ignatius de Daranyi; Minister for Croatia and Slavonia, Ervin de Cseh.

Area and Population.—The area of Hungary, including Croatia and Slavonia, is 125,039 square

miles, with a population at the census of Dec. 31, 1890, of 17,463,791. The estimated population on Dec. 31, 1898, was 18,953,000. The number of marriages in 1898 was 156,208; of births, 738,467; of deaths, 540,207; excess of births, 198,260. Budapest, the capital, had 505,763 inhabitants in 1890. The immigration of Hungarians into the United States in 1898 was 16,662, and in 1899 it was 20,920.

Finances.—The revenue of the Kingdom of Hungary in 1898 was 528,498,000 florins, of which sum 509,185,000 florins represent the ordinary revenue and 17,313,000 florins transitory and extraordinary receipts. The total expenditure was 524,442,000 florins, of which 452,370,000 florins were the ordinary expenditures of the Government, 15,828,000 florins an extraordinary contribution to common expenditure, 11,825,000 florins transitory expenditures, and 44,419,000 florins permanent investments. The budget estimate of revenue for 1900 was 527,256,702 florins, including 31,394,381 florins of extraordinary receipts. The ordinary revenue was estimated at 495,862,321 florins, derived from the following sources: State debts, 1,413,918 florins; Ministry *ad latus*, 1,000 florins; Ministry of the Interior, 3,869,099 florins; Ministry of Finance, 338,277,023 florins; Ministry of Commerce, 129,787,018 florins; Ministry of Agriculture, 18,912,346 florins; Ministry of Education and Worship, 2,305,498 florins; Ministry of Justice, 922,331 florins; Ministry of Defense, 373,488 florins. The ordinary expenditure for 1900 was estimated to amount to 474,468,628 florins; transitory expenditure, 24,381,304 florins; investments, 27,490,978 florins; total expenditure, 526,340,910 florins. Of the ordinary expenditure, 4,650,000 florins were the civil list; the Cabinet chancery required 80,091 florins; Parliament, 1,765,876 florins; Hungarian quota of common expenditure, 28,318,076 florins; common pensions, 22,135 florins; Hungarian pensions, 9,520,475 florins; national debt, 129,226,866 florins; debts of guaranteed railroads expropriated by the Government, 13,682,955 florins; guaranteed railroad interest, 201,502 florins; loans of separate ministries, 4,035,900 florins; administration of Croatia-Slavonia, 8,478,071 florins; Accountant General's office, 164,185 florins; administration of courts, 277,218 florins; Minister-Presidency, 492,390 florins; Ministry *ad latus*, 68,951 florins; Ministry for Croatia, 45,430 florins; Ministry of the Interior, 20,430,357 florins; Ministry of Finance, 91,373,655 florins; Ministry of Commerce, 90,392,059 florins; Ministry of Agriculture, 21,235,030 florins; Ministry of Instruction and Worship, 14,705,026 florins; Ministry of Justice, 17,991,727 florins; Ministry of National Defense, 17,260,653 florins.

The public debt of Hungary in 1898 amounted to 2,444,838,000 florins, of which 1,089,033,000 florins were consolidated debt, 1,054,098,000 florins the capitalized value of annuities, 12,734,000 florins treasury bonds, 69,880,000 florins debts of separate ministries, and 219,093,000 florins arrears unpaid.

Political Affairs.—The Liberal party in the Hungarian Parliament was re-enforced in 1900 by a coalition with the National party, reducing the Opposition almost to insignificance. Baron Banffy, the former Prime Minister, tried to create a separate group of his own within the Liberal party, but without success.

B

BAPTISTS. The American Baptist Yearbook for 1900 gives returns of 1,655 associations in the United States, including 43,427 churches, 29,473 ordained ministers, 4,181,686 members, with 184,845 baptisms, so far as reported, during the year. The aggregate year's contributions of the churches for all purposes were \$12,348,527. The value of the church property was estimated as \$86,648,982.

The educational institutions included 7 theological seminaries, with 68 teachers, 1,012 students, property having an estimated value of \$2,444,051, and endowment funds aggregating \$2,586,065; 104 universities and colleges, with 1,754 teachers, 26,126 students, \$15,249,058 of property, and \$14,442,807 of endowments; and 84 academies and institutes, with 634 teachers, 10,882 pupils, \$3,497,938 of property, and \$1,414,473 of endowments.

The list of Baptist periodicals includes 124 publications. A list of 36 Baptist charitable institutions is given.

The Yearbook gives the number of Baptists in the world as follows: In North America, 44,603 churches, 30,244 ministers, and 4,323,317 members; in South America (Argentine Republic, Brazil, and Patagonia), 28 churches, 15 ministers, 1,639 members; in Europe (Austria-Hungary, Denmark, Finland, France, Germany, Great Britain, Holland, Italy, Norway, Roumania and Bulgaria, Russia and Poland, Spain, Sweden, Switzerland), 3,802 churches, 3,065 ministers, 487,363 members; in Asia (Ceylon, China, India, Assam, Burmah, Japan, Palestine), 1,482 churches, 795 ministers, 116,508 members; in Africa (Central and Congo, South Africa, West Africa, St. Helena, and Cape Verde), 110 churches, 90 ministers, 7,271 members; in Australasia, 238 churches, 166 ministers, 18,682 members; making the aggregate numbers 50,263 churches, 34,375 ministers, and 4,954,780 members; while the whole number of baptisms during the year was 223,839.

The American Baptist Education Society meets alternately with the conventions of Northern Baptist societies and the Southern Baptist Convention. The meeting for 1900 was held at Hot Springs, Ark., May 10. President A. D. Montague, of Furman University, South Carolina, presided. The annual report represented that since its beginning this society had made 66 grants to 41 institutions in 29 States and the maritime provinces of Canada, to the total amount of \$1,273,100. During the past year, 13 grants, to the amount of \$134,000, had been made to 12 institutions, conditioned on their also raising certain amounts, the aggregate of which would be \$520,000. Two of these grants, amounting to \$165,000, were made after the report was prepared. Twenty-three institutions reported the addition of \$425,000 to their endowment funds. The total receipts for all purposes during the year had been \$1,071,000, besides the large contributions, amounting to \$2,000,000, for the University of Chicago, made by Mr. J. D. Rockefeller to meet the offer of like sums, making the total of gifts to that institution for the year \$4,000,000. Addresses were made at the meeting on Denominational Schools as Factors in Denominational Development during the Century, by Dr. J. W. Armstrong, editor of the Central Baptist, and on The Functions of the Intellect in Religion, by President D. B. Purinton, of Denison University, Ohio.

Publication Society.—The seventy-sixth annual meeting of the American Baptist Publication

Society was held in Detroit, Mich., May 25 and 26. The report showed that in the publication department the aggregate of sales for the year had been \$672,617, an increase of \$29,211 over the sales of the preceding year. In the missionary department, the receipts from invested funds, Children's Day, contributions from churches and individuals, bequests, etc., had been \$103,418, or \$8,343 more than in the previous year. The receipts in the Bible department had been \$17,918. The total amount of receipts in all departments on special accounts, from rents, etc., had been \$867,006. A deficit in the missionary department had increased from \$3,114 at the beginning of the year to \$11,910 at its close. Fifty-three publications had been issued, of which 546,350 copies had been printed, while the whole number of copies of new and old publications was 44,870,054. The missionary work had been vigorously pushed. In view of the complexity of the work of evangelization among the various populations of the United States, making desirable conference, counsel, and co-operation of all true disciples of Christ respecting the obligation which devolves upon them, a resolution was unanimously passed requesting the American Baptist Home Mission Society to unite with this society in the appointment of a joint committee (not to be composed wholly of members of their respective boards), whose duty it shall be to seek from similar boards of all the evangelical societies in the United States engaged in home mission work the appointment of like committees. The purpose of this step was to secure the calling of a national interdenominational conference of the representatives of all such bodies at the earliest practicable day for deliberation, discussion, and action as to the more intelligent, systematic, economical, and effective execution of their one great work—the speedy and complete evangelization of the United States.

Home Mission Society.—The sixty-eighth annual meeting of the American Baptist Home Mission Society was held in Detroit, Mich., May 23 and 24. The annual report showed that the total receipts for the year had been \$580,891, and the expenditures \$458,710, besides which \$184,663 had been added to the permanent funds. Eleven hundred and eighty missionaries had been employed in the United States, Mexico, Alaska, Cuba, and Porto Rico; French missionaries in 6 States; Scandinavian missionaries in 25 States; German missionaries in 21 States and Canada; and colored missionaries in 22 States and Territories; among foreign populations, 275 missionaries and 10 teachers; among the colored people, 63 missionaries and 201 teachers; among the Indians, 23 missionaries and 27 teachers; among Mexicans, 13 missionaries and 9 teachers; and 4 teachers among the Mormons. The society had aided in the maintenance of 31 schools established for colored people, Indians, and Mexicans, 3 day schools for the Chinese, 1 day school in Utah, and 1 in New Mexico. In the church edifice department, the principal of the Loan fund amounted to \$156,373. From this fund loans are made in small amounts at a uniform rate of 6 per cent. interest, with the stipulation that the sum loaned shall constitute the last payment required to complete the house, and shall be secured by a first mortgage on the property. The Benevolent fund, the income of which is available for gifts to churches, amounted to \$163,453. Seventy-two churches had been aided

during the year by loan or gift. The report contained a summary of financial facts for the past ten years, in which it was shown that the amount of educational endowments had grown from \$132,258 in 1890 to \$274,352 in 1900, and the permanent trust funds from \$138,928 to \$244,904. The whole amount received from legacies during this period had been \$1,065,517, of which \$109,120 had been received during the past year. A resolution was unanimously passed at the meeting of the society requesting the sister Baptist societies to join with it in appointing a commission to consider the relative amounts which the denomination should be asked to furnish for its different benevolent enterprises, and to make such other recommendations as they may deem wise; this commission to be composed of three representatives each from the Missionary Union, Home Mission Society, and Publication Society, and two representatives from each of the three women's societies; and to be requested to make its report at the anniversaries in 1901. A committee of seven persons was appointed to act with like committees from the other Baptist national societies as a joint committee to devise and formulate a method whereby the Baptist people of the United States may most suitably commemorate the beginning of the new century of the Christian era, with the understanding that it publish the conclusions that may be agreed upon not later than December, 1900. A resolution was passed approving the decision of the Government to withdraw support from denominational schools among the Indians, and to provide an unsectarian education for those people, and urging that there be no backward step in the matter and that the principle of separation of Church and state be the rule of American policy permanently and universally.

Missionary Union.—The eighty-sixth annual meeting of the American Baptist Missionary Union was held in Detroit, Mich., May 28 and 29. The Executive Committee reported that the receipts from living givers had increased during the year from \$313,935 to \$350,609. A large decrease in legacies was mentioned, the amount received therefrom being \$36,398, and the debt had nearly doubled, being now \$111,041. The total appropriations for the year had been \$509,706. The permanent fund had been increased by \$114,795. The report suggested that the form in which specific gifts to missions are made be modified, so that instead of a church or person supporting an individual missionary, it assume the responsibility for a station or some part of the work of one. Of the contributions to the treasury of the society, \$111,169 had come through the four women's societies of the East, of the West, of California, and of Oregon. An amendment was proposed to the constitution, which has to lie over for a year before it can be finally acted upon, the purpose of which is to eliminate from the terms of membership in the union all qualifications based on the contribution of money, and to make eligible any Baptist in good and regular standing who at the last meeting of his State association has been duly elected as a delegate to the meetings of the Missionary Union. Among the resolutions adopted was one deprecating the diversion of gifts from the general fund to specific objects except such as may be approved by the board. Provision was made for suitable observance of the coming in of the twentieth century.

From the missions to the heathen (in Burmah, Assam, south India (Telugus), China, Japan, Africa, and the Philippine Islands) were returned 94 stations, 474 missionaries, 3,432 native helpers, 928 organized churches, 506 of which were self-

supporting, 1,090 churches and chapels, 1,510 out stations where regular meetings were held, 105,216 church members, 843 Sunday schools with 34,867 members, 1,445 schools (including 8 theological and 71 boarding and high schools), 433 of which were self-supporting, 37,297 pupils of all grades, 722 accessions during the year, and \$87,977 of native contributions. The European missions (in Sweden, Germany, Russia, Finland, Denmark, Norway, France, and Spain) returned 1,213 preachers, 985 churches, 101,534 church members, 77,801 pupils in Sunday schools, and \$402,500 of contributions.

Meetings of the American Baptist Historical Society and of the Commission on Systematic Benevolence were held in connection with the anniversary meetings of the missionary societies. At the former meeting progress was reported in the effort to replace the collection of books which had been destroyed by the burning of the building of the American Baptist Publication Society a few years before. The Commission on Systematic Benevolence presented an account of what it had done to promote the organization of members and churches for regularity and method in contribution.

Women's Societies.—The Woman's American Baptist Home Mission Society (Boston) returned its receipts for the year as having been \$33,369, and its expenditures \$32,274. At its annual meeting in Boston, May 2, the "Paper Mission" requested a supply of "Anti-Mormon" and "Anti-Christian Scientist" literature, and a number of "State workers" described features of their labors in various fields in the United States, etc.

The twenty-third annual meeting of the Women's Baptist Home Mission Society was held at Detroit, Mich., May 21. The total cash receipts of the society for the year had been \$74,040, and the disbursements \$73,036, besides which goods having an estimated value of \$9,583 had been sent to missionaries. A debt of \$5,000 had been extinguished. One hundred and forty-nine missionaries, 24 of whom were colored, had been employed at 101 stations in 57 States and Territories, who recorded among their labors the organization of 21 Sunday schools, besides visitations, conducting and attending meetings, and holding conversations. Missionary training schools were sustained at Chicago, Ill., Raleigh, N. C., and Dallas, Texas, from the former two of which 19 students had been graduated.

Southern Baptist Convention.—The forty-fifth meeting of the Southern Baptist Convention was held at Hot Springs, Ark., beginning May 11. The Hon. W. J. Northen, ex-Governor of Georgia, was chosen president. The Home Mission Board reported that its total receipts for the year, including a special annuity gift of \$4,000, had been \$79,366. All the States except one had shown an increase in cash contributions. Six hundred and seventy-one missionaries had been employed, serving 2,168 churches and stations, who returned 5,696 baptisms, 11,951 additions in all, 195 churches constituted, 71 houses of worship built and 63 improved, with an expenditure of \$68,223, and 639 Sunday schools organized, with 24,675 teachers and pupils. The State boards of Alabama, Arkansas, Florida, Georgia, Indian Territory, Kentucky, Louisiana, Maryland, Missouri, Mississippi, North Carolina, Oklahoma Territory, Tennessee, Texas, and Virginia were in co-operation with the board in part or the whole of their work. The report designated as frontier work to which it was giving much attention the effort to provide churches and preaching for the population which was pouring rapidly into a strip of terri-

tory about 1,000 miles in length and 500 miles broad stretching through Indian and Oklahoma Territories and Texas. The increase of the foreign population in the larger cities made co-operation with the State boards a matter of growing importance. Special attention was invited to the problem of work among the negroes. It was believed that the feeling of these people toward the whites was changing, so that they were becoming more inclined to rely upon those of the South, and that the conditions which had rendered it impossible for Southern Baptists to help the negro in the past were passing away. The need for schools in the mountain region was another matter demanding serious consideration. It had been the policy of the board in the past to aid in the building of churches at important points so far as the funds contributed would allow, and it was of the opinion that the time had now come for the establishment of a permanent fund for that purpose. Offers of considerable gifts had already been made toward the constitution of such a fund. A gift of \$4,000, on which an annuity of $3\frac{1}{2}$ per cent. was paid, had been received through the agency of the Woman's Missionary Union, and was available for church extension purposes. The Sunday School Board had received \$71,602, the same being its largest receipt in a single year. The reserve fund had been advanced from \$19,000 to \$30,000, and was kept loaned out under safe securities. The board was free from debt, and had a cash balance of \$1,630. It had received through the Woman's Missionary Union an annuity gift of \$1,000. The appropriations aggregated \$19,479, including gifts of \$200 in cash to the Chinese Baptist Publication Society, Canton, and of \$100 in books to the library of the seminary. The receipts of the Board of Foreign Missions had been \$140,102, a considerable increase over those of the previous year. A balance of \$8,459 remained over the expenditures. Sixteen new missionaries had been sent out. From the mission stations were returned 113 churches, 155 out-stations, 41 men and 53 women American missionaries, 25 ordained and 104 unordained native missionaries, 6,537 members, 2,408 pupils in Sunday schools, 57 houses of worship, 45 day schools with 1,278 pupils, and 134 baptisms during the year, while the contributions of the mission churches amounted to \$7,095. The missions were in China, Japan, West Africa, Italy, Brazil, and Mexico. A committee was appointed to confer with a deputation of 100 members appointed by the Arkansas convention of colored Baptists, with reference to the framing of a plan of co-operation. The committee on the celebration of the new century presented a report, which was adopted, recommending that the convention devote itself for the next few years to the special object of eliciting and combining all the energies of the whole denomination to the sacred effort for the propagation of the Gospel. As the best method of accomplishing the end sought, a joint committee of co-operation was, by the advice of the committee, constituted, to consist of three members appointed by each of the three boards of the convention, the special work of which should be "to labor systematically and persistently to secure the active co-operation of every church within our bounds in the work of each of our boards, and, as far as possible, personal contributions from every member of every church; that in thus laboring this committee of co-operation shall represent impartially all the boards of the convention." The recommendations of the committee further contemplated the appointment of a committee of three by each State convention to co-operate with the

general committee within the State. Resolutions were adopted on temperance declaring truceless hostility to the liquor traffic in all its forms, favoring prohibition for the nation and the State and total abstinence for the individual, and condemning the permission by the Government of the canteen in the army and the establishment of the liquor traffic in certain places under military occupation.

Colored Baptists.—The colored Baptists in the United States are represented in the National Baptist Convention, which has affiliated with it a Foreign Mission Board, a Home Mission Board, an Educational Board, and a Young People's Union. The twentieth annual meeting of this body was held in Richmond, Va., beginning Sept. 12. Another colored Baptist organization of more recent origin is the Lott Carey Baptist Foreign Mission Convention, which was formed in 1897 in response to a call from the colored Baptists of North Carolina. At the general convention of organization, held in Washington in December, 1897, delegates were present from North Carolina, Virginia, the District of Columbia, Maryland, Pennsylvania, New Jersey, New York, and New England. The constitution adopted then sets forth as the object of the society "the fostering of the kingdom of God, especially in foreign lands," in order to accomplish which object co-operation would be sought with any and all existing Baptist organizations, as occasion might require, from time to time. At the second anniversary of this society, held in Baltimore, Md., in August, 1899, receipts of \$401 and the appointment of missionaries at Brewerville, Liberia, and Cape Town, South Africa, were reported. The next meeting was appointed to be held at Alexandria, Va., in August, 1900. The whole number of colored Baptists is estimated at 1,576,792.

Constitution and Rights of Baptist Conventions.—At the meeting of the Baptist State Convention of Texas, in 1899, the Rev. Dr. S. A. Hayden was excluded on grounds satisfactory to the convention. For this he brought suit against the Rev. Dr. J. B. Gambrell, the Rev. Dr. B. H. Carrol, the Rev. J. B. Cranfill, and other Baptists of Texas, charging a malicious conspiracy, with attempts to ruin his character and business, and laying claim for damages of \$50,000. A verdict for the plaintiff, awarding him \$30,000, was found in the lower court, and the case was carried on appeal to the Supreme Court. This tribunal rendered a decision in March reversing the rulings of the lower court and in all points in favor of the defendants in the original suit. It upheld the authority of the State convention to decide upon the qualifications of its members, declaring that by accepting credentials and applying for admission as a member, Dr. Hayden, the original plaintiff, "must be held to have assented and submitted himself to the exercise of all the lawful authority which pertained to that body in relation to the qualifications of its own membership." From an examination of the portions of the constitution of the State convention which provide for messengers from the churches and disclaim any power or authority over any church, the court argued that it did not appear that the convention was a body exercising delegated powers. "While its membership is made up of persons selected by churches, associations of churches, and missionary societies, co-operating with the convention as an institution, it nowhere appears that such messengers are to perform delegated duties, are in any way bound to conform to instructions of the bodies naming them as messengers, or have any right to bind such bodies. . . . We must, then,

understand the annual convention to be a deliberative body, composed of individuals voluntarily named by the several churches, associations of churches, and missionary societies, which co-operate in work, without authority extending beyond its membership. It has no body superior to it to control its deliberations and proceedings, or subordinate to it to be bound thereby. If, then, it has no supervisory power over it, exercises no delegated powers, and is not representative, it must be an independent sovereign body, under the limits of its own organic law." Concerning the question of jurisdiction over members, the court recognized the right of selection by the bodies named, but held that the presumption is that the members shall be good men, and in harmony with the purposes of the organization. The method of selection had as its purpose to fix membership in proper limits, secure general co-operation, and obtain the best representatives of the denomination. With nothing in the constitution renouncing the right of the convention to control its membership, the court decided that it clearly had that right. "The collective wisdom, judgment, and integrity of such assemblies generally is the only safeguard against the abusive exercise of such power. Such bodies must be regarded as possessing the inherent right and authority to protect themselves in the matter of their membership, and in the exercise of that right and authority they are answerable alone to their own consciences and to general public opinion. They are not limited to the power to investigate and determine the validity of the election and the regularity of the credentials of one claiming membership, as is contended by the appellee, but they have the power to refuse him membership upon any grounds which may seem good and sufficient to the body itself." The transaction was regarded by the court as coming under the head of "privileged communications." The right of the convention to control its own membership, and the submission to its authority in that respect by a member when he accepts credentials and applies for admission, were regarded as first principles of such privileged communications. Another condition of them is that the action taken shall be under a sense of duty to the body and its work, and should have reasonable grounds as its basis. Mere dislike for the person expelled, because of his actions and their effect upon the common work, were regarded as not constituting the malice necessary to make a case of libel. The decision was regarded by the parties supporting the action of the convention as constituting a legal vindication of the Baptist principles of the freedom and independence of the churches.

The Baptist Congress.—The eighteenth annual Baptist Congress was held in Richmond, Va., Nov. 20 to 22. The Rev. A. P. Montague, D. D., president of Furman University, presided. The subjects of *The Ritschlian Theology: its Meaning and Value*, *Is the Trust Beneficial or Injurious to Society?* *Where lies the Efficiency of Jesus's Work in the Reconciliation?* *Romanist Survivals in Protestantism*, *Weak Points in the Baptist Position*, and *Child Nurture in Baptist Polity* were discussed, each by two designated writers, two designated speakers, and volunteer speakers, representation of the different sides of the several questions being sought in the selection of the writers and speakers. The congress is a voluntary body, "not representative, deliberative, legislative, or missionary," but a free arena for the expression of opinion, and no one but the individual speakers is committed by the declarations and expressions made in it.

Baptists in Canada.—The 18 Baptist associations in Ontario and Quebec return 464 churches, with 43,345 members, and 2,160 baptisms during the year, 5,000 teachers and 37,000 pupils in Sunday schools, and an average attendance there of 24,144.

The twelfth annual convention of these churches met at Woodstock, Ontario, Oct. 15 to 19. The address of the president, Mr. John Stark, on Conditions of Baptist Success, Past and Present, bore upon the denominational history, and papers were read in the convention dealing with the history of the Baptist churches of the two provinces with their mission and educational work, and their growth during the nineteenth century. The Rev. S. S. Bates was chosen president of the convention for the ensuing year. The Church Edifice Society, founded in 1868, had received \$1,729 and expended \$1,164 during the year, and was now aiding 28 churches. Eighty-four churches in all had been aided; and though the permanent fund had never exceeded \$8,500, the loans granted had aggregated more than \$40,000. The home mission work of the denomination began in 1836 with the organization of the Canada Baptist Missionary Society at Montreal; but the present Home Mission Society sprung from the Regular Baptist Missionary Society of Canada, which was formed at Brantford in 1851. Its present work was carried on in a region extending 1,600 miles from east to west, and 400 miles from Lake Erie northward. During the year 9 churches had been organized, 5 chapels built, 3 buildings enlarged, 6 parsonages erected, and 1,052 persons baptized. During the past twenty years \$343,111 had been contributed to the home mission work, 172 chapels built, 153 churches organized, 64 churches become self-sustaining, and 12,653 persons baptized. Fifty-five thousand dollars had been contributed during the year for foreign missions, and all the expenses of the work had been met. The mission fields among the Telugus in India and in Bolivia returned 33 churches, 491 baptisms during the year, 4,000 members, 10 ordained and 63 unordained native helpers, 81 teachers, 7 colporteurs, 15 Bible women, 136 Sunday schools, with 3,387 pupils; 70 day schools, with 961 scholars; 7 boarding schools, with 182 students; and \$1,380 contributed by the native churches. Seven missionaries had been appointed to Bolivia, 3 of whom were already on the field, and 4 missionaries had been secured for India. The present capital of the Superannuation fund was \$20,737, and the income for the past year had been sufficient for the payment of all claims in full. The accounts of the book room, presented by the Board of Publication, showed a loss of \$604 on six months' business. Reports were made of English, German, and Galician work in Manitoba and the Northwest. The convention of Manitoba included 69 churches, with 3,692 members in 58 of them, while services were maintained in 175 places, in 40 of which there were none but Baptist meetings. In British Columbia regular meetings were held in 9 districts. Two churches in Victoria were maintaining Japanese work. The educational report showed a surplus of funds, for the first time since 1892. The French Baptist churches had raised more than \$2,000 for their own support. Report was made of work in connection with the Grande Ligne Mission at Feller Institute, where 3,500 young people had been taught since the beginning; of the mission in Montreal; the St. Roch Mission, Quebec; the Ottawa Valley, Nova Scotia, Manitoba, and five single stations.

The reports made to the Baptist Convention of the Maritime Provinces indicated considerable

gain in the contributions to denominational objects, including a few large individual contributions. The income for home missions in the Northwest had been \$5,356, and for Nova Scotia and Prince Edward Island \$8,117. Work had been done in 75 churches in the latter section. The Foreign Mission Board had received \$20,844 and had expended \$19,875. Of the receipts, \$1,000 more had come from the women's societies than from the ordinary gifts of churches and individuals. The 7 churches in the foreign field had 346 members, and returned 41 baptisms during the year. Acadia University had \$200,000 of trust funds, encumbered with \$66,000 of debts. Including the proportion conditionally contributed by Mr. J. D. Rockefeller, \$41,788 had been obtained on endowment pledges. A plan was considered for raising \$50,000 as a Century fund.

Baptists in Great Britain.—The Baptist Union of Great Britain and Ireland met in its spring session in London, April 23. The report of the council showed an increase of about 25,000 chapel seats during the year. The membership had apparently fallen from 355,218 to 353,258, but 46 churches, whose membership was included in the figures of the previous year had made no return. Estimating the number thus omitted, the membership would really be 360,475. The number of baptisms had increased from 16,805 to 16,899. During the year £66,743 had been spent on new chapels, £36,785 on improvements, new schools, etc., and £77,024 in payment of debts. The receipts of the union had been £39,083, including £22,226 for the Twentieth Century fund. The capital of the Annuity fund amounted to £167,364, but the number of ministers who had enrolled themselves under it had so largely increased that the free contributions of the churches had been insufficient to maintain the annuities at their full amount, and it had been necessary to make small reductions in them. The Committee of the Home Mission reported that there were now 107 churches in 20 associations on the list, 55 of which churches were formed into 25 groups of 2 or 3 each. There were in addition 27 mission stations, and over the total number of preaching places—134—72 mission pastors. These churches returned 5,054 communicants and average attendances of 6,411 in the morning and 10,733 in the evening, and had raised for various purposes £10,067. The campaign for the Twentieth Century fund was being pursued with great vigor and success. Eight hundred and ten out of the 1,180 churches connected with the union had adopted the scheme. The Irish Baptists were trying to raise £7,000 for it, the Welsh Baptist Union £50,000, and the Scotch Baptist Union £20,000. The whole amount received to date was £133,861. The Board of Introduction, which had been recently constituted for such purposes, had made recommendations of pastors to churches or of churches to pastors in more than 60 cases, and some settlements had resulted. The ministerial recognition committee reported upon the examination of ministers who sought recognition by the Baptist Union. Considerable progress had been made in the negotiations for the erection of a Baptist church house, with a chapel or hall, to serve as a headquarters for the denomination. A resolution of sympathy with the scheme of the Evangelical Free Church Council for a "simultaneous mission" was adopted, with a pledge of the co-operation of the Baptist churches for its success. The Rev. Alexander McLaren, D. D., was elected vice president of the union and president for 1901. The resolution adopted on temperance approved the proposal for the association of the

Free churches in a temperance crusade at the close of the nineteenth and the opening of the twentieth century, and advised the co-operation of the Baptist churches with it. Other resolutions protested against the scheme for a state-endowed Roman Catholic University in Ireland, and against certain provisions in the new educational code. The union also denounced certain incidents in the ritualistic controversy in the Established Church as constituting a grave public scandal, and expressed the belief that the true and only remedy for such conditions lay in disestablishment and disendowment. The Baptist Building fund had granted the applications of 42 churches for sums varying from £750 to £30, extending over periods of from five to ten years, amounting in all to £12,880. Practically the whole of the capital of about £53,000 was in use. The receipts from subscriptions and collections had decreased.

The autumnal session of the union was held at Leicester, beginning Oct. 2. The president, the Rev. William Cuff, in his opening address presented the Federation of Free Churches, the Twentieth Century Fund, and the Simultaneous Mission as the "three great movements" occupying the attention of evangelical Christians. A proposal for a union of the ministers and missionaries of all evangelical churches in a concert of prayer and special intercession in view of better service in the new century was commended to the earnest consideration of ministers. Pastors, superintendents, and teachers in Sunday schools were advised to warn the youth under their charge against the dangers of cigarette smoking. Resolutions were passed urging the importance of securing as representatives in Parliament men of pure lives, unselfish patriotism, and earnest and noble character; condemning resort to war; welcoming the definite constitution of the tribunal of arbitration at The Hague; warning the people against the growth of militarism, the revival of racial animosity, "the moral, not less than the physical, evils of war," and advising the cultivation in every possible way of the spirit of international brotherhood; mentioning the questions of licensing reform, the housing of the poor, the proper care for the aged poor, the increase of efficiency in state education for the children of the nation, the reform of the land laws, and the establishment of complete religious equality as lying at the root of the stability, prosperity, and usefulness of the nation; and renewing protests against support of sectarian schools from public funds, and demands for government by the people of all elementary schools supported by the people. The Annuity fund having reported an excess in expenditures of £2,921 over income, the subject of remedial measures was referred to the council of the union for consideration. The report of the Twentieth Century fund showed that £158,000 of the £250,000 which it was proposed to raise had been subscribed.

Baptist Missionary Society.—The financial statement of the Baptist Missionary Society, made at the annual meeting, April 19, showed that the year's receipts for the general work of the missions, exclusive of special funds, had been £66,593 and the expenditures £73,716. An increased expenditure of £1,210 was wholly accounted for by the large addition (40) to the staff of missionaries which had taken place since the centenary celebration. Including special funds and special gifts to the Indian Famine fund, the total receipts had been £77,642, an increase of £2,310 over the previous year. The reports from the mission fields indicated prosperous work. New stations had been opened in India, with a large in-

gathering of converts and a great improvement and advance in Christian elementary schools. Similar conditions prevailed in China. The new memorial station at Kibokolo had been opened on the Congo, and large additions had been made to the native churches. A considerable number of young men had offered themselves for missionary service who could not be sent out for want of means.

The Zenana Mission reported 60 missionaries, with about 200 native Bible women and school teachers laboring in India; 3,476 children in the schools, 310 of whom were in boarding schools; 1,500 pupils regularly taught in zenanas; and Bible lessons given in 3,283 houses. On account of its distance from other stations, the mission in Madras had been transferred to the Wesleyans. The financial reports showed an increased deficit on the year's working, the amount having reached £1,434.

The American Baptist Yearbook gives the numbers of the Baptists in the British Isles as 2,750 churches, 1,959 ministers, and 378,475 members, with 16,996 baptisms during the year.

Baptists in Germany.—The Baptist Union of Germany, which was formed in 1849, held its eighteenth triennial meeting in Hamburg, Aug. 20-23. The report upon the newly erected publishing house mentioned a gift of \$10,000 from Mr. J. D. Rockefeller to pay off a current debt on the property, which after some parleying with the authorities had been admitted free of income tax. The report upon the Orphan fund, the object of which is to aid in locating orphans in Baptist families, represented that no trouble was had in finding places for orphans, that the supply of good homes was larger than the demand, and that such an institution as an orphan asylum was not needed among the Baptists of Germany. The Chapel Building fund had a capital of about 77,000 marks. Mr. W. S. Oncken, son of the Rev. J. G. Oncken, founder of the Baptist Church in Germany, had begun a collection in England for a Jubilee Chapel Building fund in commemoration of the one hundredth anniversary of his father's birth. An effort was instituted to raise a jubilee endowment of 100,000 marks for the Widows' and Orphans' Invalid fund, toward which subscriptions of 26,000 marks were made during the meetings of the union.

The Baptists in Germany have 155 churches, with more than 700 additional preaching stations, and 28,898 members. Twenty-four churches had been built and 5,665 persons baptized since 1897. During the same period, 355,000 copies of 80 books had been issued from the publishing house at Cassel; and this establishment had realized profits amounting to \$20,000. Eleven colporteurs were employed.

Baptist Union of Jamaica.—The Baptist Union in Jamaica reached its fiftieth year in 1900. During the half century of its existence the number of churches had increased from 44 to 182, the number of ministers was twice what it was when the union was formed, and the membership had nearly doubled. The jubilee report referred to many public questions on which the voice of the union had been heard. Among them was that of the disestablishment of the Church of England in the island, for which it had sent repeated petitions to the local Legislature and the British House of Commons, eventually with success.

The Baptists in this island number 182 churches, 61 ministers, and 33,638 members, and return 1,669 baptisms during the year.

BELGIUM, a constitutional, representative, and hereditary monarchy in western Europe. The

legislative power is vested in the Senate and the Chamber of Representatives. The Senate consists of members who are elected by the direct suffrage of male citizens over thirty years of age for the term of eight years, and in addition 2, 3, or 4 members from each province elected indirectly for the same term. The members of the lower chamber are elected directly for four years by all male citizens over twenty-five years of age. An additional vote or two votes additional are allowed to those having certain legal qualifications, which are the possession of real property worth 48 francs a year, money in Belgian funds or savings banks yielding 100 francs interest, a profession, a public office past or present, a diploma from one of the higher educational institutions, or the status of a married man or widower thirty-five years old who has legitimate issue and pays a house tax of 5 francs or more. Any one who possesses three or more of these qualifications is entitled to cast three votes. The number of electors in 1898 was 1,418,480, possessing 2,175,957 votes.

The reigning sovereign is Leopold II, the second King of the Belgians, born April 9, 1835, who succeeded his father Dec. 10, 1865. His heir is his brother, Philippe, Count of Flanders, born March 24, 1837, who has one son, Prince Albert, born April 8, 1875. The Cabinet of Ministers in the beginning of 1900, constituted on Aug. 5, 1899, was composed of the following members: President of the Council, Minister of Finance, and Minister of Public Works, M. de Smet de Naeyer; Minister of the Interior and of Public Instruction, M. de Trooz; Minister of Foreign Affairs, M. de Faveau; Minister of Justice, M. van den Heuvel; Minister of Agriculture, Baron van den Bruggen; Minister of War, Major-Gen. A. Cousebant d'Alkemade; Minister of Railroads, Posts, and Telegraphs and Minister of Industry and Labor, M. Liebaert.

Area and Population.—The area of Belgium is 11,373 square miles. The population at the census of 1890 was 6,069,321. On Dec. 31, 1898, it was computed to be 6,669,732, comprising 3,326,190 males and 3,343,542 females. The number of births in 1898 was 190,108; of deaths, 114,736; excess of births, 75,372. The number of emigrants in 1898 was 22,860, and of immigrants 27,393, giving an excess of 4,533 immigrants. Brussels, the capital, had on Dec. 31, 1898, an estimated population of 561,130; Antwerp, 277,576; Liège, 169,202; Ghent, 162,652.

Finances.—The revenue of the Government in 1897 amounted to 499,613,000 francs, and expenditure to 511,308,000 francs. The budget voted for 1900 makes the total ordinary revenue 452,246,618 francs, of which 56,135,000 francs are the yield of direct taxes, 100,764,764 francs are derived from customs and excise duties, 14,633,000 francs from registration and other fees, 221,620,060 francs from railroads, tolls, etc., 14,776,800 francs from capital invested, and 4,316,974 francs from repayments. The total ordinary expenditure was estimated at 450,929,726 francs, of which 127,940,416 francs were for interest and sinking fund of the public debt, 5,044,157 francs for the civil list and dotations, 24,959,885 francs for the Ministry of Justice, 3,069,228 francs for the Ministry of Foreign Affairs, 29,245,259 francs for the Ministry of the Interior and Public Instruction, 11,801,470 francs for the Ministry of Agriculture, 4,582,520 francs for the Ministry of Industry and Labor, 147,122,930 francs for the Ministry of Railroads, Posts, Telegraphs, and Telephones, 53,520,911 francs for the Ministry of War, 34,747,385 francs for the Ministry of Finance and Public Works, 7,019,564 francs for the gendarmery, and 1,876,000 francs for repayments.

The national debt in 1899 amounted to 2,603,787,175 francs, including Belgium's share in the old Netherlands debt. This share amounts to 219,959,632 francs, on which 2½ per cent. interest is paid. The Belgian consolidated debt, amounting to 2,383,827,543 francs, all raised for railroads and other useful works, bears 3 per cent. interest, and is being paid off by means of a sinking fund.

The Army.—Belgium has only recently begun to train a national army and build a system of fortifications, having formerly relied on the treaty of London, by which Austria, Great Britain, Prussia, and Russia undertook to protect the neutrality and inviolability of Belgian territory. A system of conscription has been introduced, although the army is still partly recruited by enlistment. Every able-bodied man at the age of nineteen is liable to be drawn, but those who have the means can provide substitutes. The annual contingent is 13,300 men. The term of service is nominally eight years, the actual requirement not over a third of this period. The peace strength of the army in 1899 was 3,472 officers and 48,030 men, or 51,502 of all ranks. The infantry numbered 1,745 officers and 27,900 men; cavalry, 304 officers and 5,762 men; artillery, 544 officers and 8,225 men; engineers, 146 officers and 1,880 men; gendarmery, 65 officers and 2,839 men; general staff, military schools, train, administration, etc., 668 officers and 1,424 men. The regular army had 9,045 horses, the gendarmery 1,810 horses. There were 204 pieces of field artillery. The war strength of the army is 163,000 men of all ranks, with 25,823 horses, not including the civil guards, who in 1899 numbered 40,443 men.

Commerce and Production.—The value of the general imports in 1898 was 3,279,047,704 francs, and of the general exports 3,019,882,489 francs. Of the imports, the value of 1,714,379,111 francs entered by sea and 1,564,668,593 francs by river and rail, and of the exports, 1,256,226,730 francs in value were shipped by sea and 1,763,655,759 francs by river and rail. The imports for consumption were valued in 1898 at 2,044,700,000 francs, the exports of domestic products at 1,787,000,000 francs; the transit trade was 1,232,800,000 francs. The special imports of cereals in 1898 were 383,408,000 francs in value; textile materials, 191,743,000 francs; mineral substances, 127,657,000 francs; chemicals and drugs, 103,205,000 francs; gums and resins, 94,611,000 francs; lumber and wood manufactures, 91,802,000 francs; metals, 81,328,000 francs; oil seeds, 65,203,000 francs; hides and skins, 64,713,000 francs; cotton, wool, and silk fabrics, 60,275,000 francs; coffee, 46,342,000 francs; live animals, 44,262,000 francs; coal, 40,347,000 francs; animal products, 37,682,000 francs; dyes and colors, 34,812,000 francs; machinery, 28,004,000 francs; linen, wool, and cotton yarns, 26,475,000 francs; wines, 25,723,000 francs; tobacco, 14,965,000 francs; fertilizers, 14,631,000 francs; butter and margarine, 11,897,000 francs. The special exports of textile materials in 1898 were valued at 112,655,000 francs; cereals, 109,005,000 francs; coal, 107,386,000 francs; linen, wool, and cotton yarns, 97,873,000 francs; machinery and vehicles, 88,705,000 francs; glass, 80,600,000 francs; iron, 75,330,000 francs; chemicals and drugs, 70,616,000 francs; hides and leather, 67,889,000 francs; mineral substances, 67,053,000 francs; steel, 57,701,000 francs; zinc, 54,037,000 francs; textile fabrics, 52,651,000 francs; sugar, 45,220,000 francs; oil seeds, 37,571,000 francs; horses, 34,946,000 francs; fertilizers, 34,105,000 francs; animal products, 32,844,000 francs; resin and bitumen, 30,313,000 francs; dyes and colors, 28,504,000 francs; meat, 20,958,000 francs.

The special trade with the principal foreign

countries in 1898 is shown in the following table, giving the values of the special imports and exports in francs:

COUNTRIES.	Imports.	Exports.
Germany	245,318,000	451,281,000
France	311,321,000	381,968,000
Great Britain	289,806,000	306,514,000
Netherlands	164,960,000	208,158,000
United States	303,096,000	51,575,000
Russia	125,919,000	41,161,000
Argentine Republic	100,083,000	20,600,000
British India	92,106,000	18,055,000
Roumania	79,812,000	10,045,000
Sweden and Norway	52,469,000	30,791,000
Spain	37,362,000	23,164,000
Brazil	43,402,000	14,322,000
Italy	24,388,000	32,608,000
Switzerland	6,006,000	34,886,000
Australia	27,567,000	6,799,000
Chili	21,903,000	5,671,000
Egypt	674,000	18,127,000
Peru	1,287,000	704,000

When Belgium first became a kingdom in 1831 the total value of imports was only 98,000,000 francs, and of exports 108,000,000 francs. In 1898 Belgium was the seventh country in the world according to the value of its special commerce, the imports having increased in the year 10 per cent. and the exports 9 per cent. According to the value per capita Belgium leads all countries, this being 574 francs, while in Great Britain it is 480, in Germany 211, in France 207, in the United States 129, in Austria-Hungary 92, in Italy 83, and in Russia 40 francs per capita. Belgians have invested a great amount of capital in Russian industries, estimated at 1,100,000,000 francs, and the present value of the investments is 50 per cent. more. Half the foreign companies started in Russia during 1899 are Belgian. Belgians, too, have turned their attention to the industrial development of China, sending a commercial mission to that country and forming companies and syndicates to build railroads and to work mines.

The agricultural lands of Belgium were divided up in 1895 among 829,625 holders, of whom 544,041 had less than a hectare and only 3,584 more than 50 hectares. The area farmed by the proprietors was 593,333 hectares, while 1,320,358 hectares were cultivated by tenants. The wheat crop in 1897 was 6,681,568 hectolitres; barley, 1,264,914 hectolitres; rye, 6,520,380 hectolitres; oats, 10,596,398 hectolitres; potatoes, 29,037,626 quintals; sugar beets, 8,722,105 quintals; other roots, 11,776,950 quintals. The tobacco crop in 1895 was 5,166,000 kilogrammes. There were 271,527 horses, 1,420,976 cattle, 235,722 sheep, and 1,163,133 hogs in 1895. The forests, which cover 17.70 per cent. of the total area of the kingdom, belong in part to the state, some of them to communes and public institutions, and the rest to private individuals. The annual value of forest products is 22,000,000 francs. About 19 per cent. of the working population is engaged in agriculture and about the same percentage in mining and metal industries, while other industries employ a larger proportion. The number of persons employed in coal mines in 1897 was 122,846. The production of coal in 1898 was 22,088,000 tons, valued at 242,894,000 francs. The pig-iron product was 979,101 tons; manufactured iron, 509,100 tons; ingot steel, 633,130 tons; steel rails, 558,995 tons. The import of iron ore, chiefly from Luxembourg, was 2,544,403 tons, while the product of Belgian mines was 240,774 tons.

Navigation.—The number of vessels entered at Belgian ports during 1898 was 8,335, of 8,233,700 tons; cleared, 8,370, of 8,283,910 tons. Of the total number entered 4,010, of 3,993,180 tons, and of those cleared 4,035, of 4,054,203 tons, were British;

1,915, of 1,486,817 tons, of those entered and 1,916, of 1,486,084 tons, of those cleared were Belgian; 986, of 1,451,901 tons, of those entered and 975, of 1,417,665 tons, of those cleared were German; and afterward in order came the Norwegian, Danish, French, Dutch, Japanese, Swedish, and Russian flags.

Railroads, Posts, and Telegraphs.—The length of railroads in operation on Jan. 1, 1898, was 2,867 miles, of which 2,069 miles were operated by the Government and 798 miles by private companies. The number of passengers carried on the Government railroads during 1897 was 91,359,843, paying 57,160,275 francs; on the companies' railroads, 22,993,483 passengers, paying 12,028,506 francs. The gross receipts of the Government railroads were 170,412,728 francs, and expenses 102,081,540 francs; receipts on companies' lines were 42,333,896 francs, and expenses 20,202,378 francs. The capital cost of the Government lines was 1,461,434,198 francs.

The post office in 1898 forwarded 123,040,221 private and 23,455,925 official letters, 53,174,433 postal cards, 107,960,411 printed packets, and 122,451,701 newspapers. The receipts were 22,634,951 francs; expenses, 12,425,263 francs.

The Government telegraph lines in 1898 had a total length of 3,960 miles, with 45,944 miles of wire. The number of messages transmitted during the year was 10,505,200; receipts were 7,880,485 francs, and expenses 6,222,503 francs.

Political Affairs.—A new Chamber of Representatives was elected at the end of May. The result was as follows: Catholics, 85; Christian Democrats, 1; Liberals and Radicals, 33; Socialists, 33. Brussels elected 5 Socialists, 2 Progressives, 8 Catholics, and 3 Liberals to the Chamber. The provincial elections did not disturb the predominance of the Catholics, who obtained majorities in 6 provinces out of 9, although partial successes were won by Socialists and Liberals. The Socialist party immediately after the elections set on foot a new movement in favor of unrestricted suffrage, and during an extraordinary session of the Chamber held in July the Socialist Left had recourse to obstruction in order to force the Government to introduce a bill to establish universal and unrestricted suffrage, while political demonstrations in support of that object took place in the large towns.

Correspondence with the British Government took place in consequence of an attempt on the life of the Prince of Wales in a railroad car at Brussels committed on April 4 by a young tinsmith, who said that he wanted to kill the British heir apparent because he had caused thousands of men to be slaughtered in South Africa. The would-be assassin, who was only fifteen years old, was tried in July, and the court decided that he was demented, after the jury had found him guilty.

BOLIVIA, a republic in South America. The Congress consists of a Senate of 18 members, elected for six years, and a House of Representatives, containing 64 members, elected for four years by all adult male Bolivians who are able to read and write. The President is elected for four years by the vote of the nation, and is not eligible for the next succeeding term. The President, who assumed office on Aug. 15, 1896, was Severo Fernandez Alonso. Dr. Rafael Peña was elected first Vice-President and Dr. Genaro Sanjines second Vice-President. On Oct. 20, 1899, the Government was overthrown, and on Oct. 26 Gen. José Manuel Pando was declared President.

Area and Population.—The area of Bolivia is 567,430 square miles. The population is estimated

at 2,019,549, not including tribal Indians. About a fourth of the people are white, a fourth of mixed blood, and half are Indian.

Finances.—The revenue in 1899 was estimated in the budget at 7,973,190 bolivianos, and expenditure at 8,104,200 bolivianos. The foreign debt, secured on the customs collected at Arica, amounted in 1898 to 1,084,555 bolivianos, the internal debt to 3,707,541 bolivianos.

The Army.—The active army, consisting of 2 infantry battalions, 2 regiments of cavalry, 2 regiments of artillery, and 1 battalion of garrison in each department, numbers 2,975 men. In the National Guard about 64,000 men are enrolled.

Commerce and Production.—The production of silver in 1897 was 11,765,470 ounces, against 9,113,564 ounces in 1896. Other mineral products are tin, copper, lead, zinc, bismuth, antimony, and salt. Rubber, cinchona, coca, and coffee are exported, as well as wool and hides and skins. Provisions, hardware, cotton and woolen cloths, clothing, and wines and spirits are imported. The import trade is carried on mainly by German merchants.

BRAZIL, a federal republic in South America. The National Congress consists of a Senate of 63 members, 3 from each state and from the federal district, elected for nine years by direct suffrage, one third retiring every three years, and a House of Deputies, consisting of as many members from each state as there are multiples of 70,000 in its population, elected by universal suffrage, every adult male Brazilian having the right to vote unless he is a soldier in active service, a member of a monastic order, or a pauper or criminal. The President of the republic is elected by the direct suffrage of the nation.

The President elected for the term beginning Nov. 15, 1898, is Dr. Manoel Ferraz de Campos Salles. The Vice-President is Dr. Francisco Rosa e Silva. The Cabinet in the beginning of 1900, constituted in November, 1898, consisted of the following members: Minister of Foreign Affairs, Dr. Olyntho de Magalhães; Minister of Finance, Dr. João Mustinho; Minister of War, Gen. João Nepomuk de Medeiros Mallet; Minister of Industry, Severino Vieiro; Minister of the Interior and Justice, E. Pessoa; Minister of Marine, Rear-Admiral J. Pinto da Luz.

Area and Population.—The area of Brazil is 3,209,878 square miles. The population at the census of 1890 was 14,333,915. The immigration in 1897 was 112,495. In 1898 the total number of immigrants was 53,822, of whom 33,272 were Italians, 11,662 Portuguese, 5,943 Spaniards, 609 Austro-Hungarians, 477 Germans, 247 French, 137 Russians, and 129 Swiss.

Finances.—The estimated revenue for 1898 was 328,594,014 milreis, and expenditure 329,398,845 milreis. For 1899 the estimated revenue was 346,164,000 milreis, and of expenditure 346,000,423 milreis. The budget estimate of revenue for 1900 was in paper 289,040,000 milreis, of which 162,033,000 milreis were expected from import duties, 35,000,000 milreis from railroads, 15,500,000 milreis from posts and telegraphs, 18,000,000 milreis from stamps, 27,770,000 milreis from excise duties, 13,152,000 milreis from various ordinary sources, and 17,585,000 milreis from extraordinary sources. The estimated revenue to be collected in gold was 44,948,000 milreis, of which 18,506,000 milreis were expected from import duties, 310,000 milreis from extraordinary sources, 505,000 milreis from various ordinary sources, and 25,627,000 milreis from the emission of paper currency. The estimated expenditure of gold was 36,974,000 milreis, of which

1,055,000 milreis were for foreign affairs, 13,450,000 milreis for agriculture, and 22,460,000 milreis for finance. The estimate of currency expenditure was 263,162,000 milreis, of which the Department of the Interior and Justice required 15,897,000 milreis, Foreign Affairs 527,000 milreis, the navy 23,077,000 milreis, the army 45,596,000 milreis, the Department of Agriculture 62,235,000 milreis, and the Department of Finance 115,830,000 milreis.

The national obligations on April 30, 1898, consisted of a foreign debt of £38,006,000 sterling, an internal debt of 637,425,600 milreis, 306,936 milreis of floating liabilities, 21,027,500 milreis of treasury bills, and 785,941,758 milreis of notes in circulation; total amount, 1,444,701,794 milreis. The deficit existing at the end of 1897 was extinguished by means of an internal 6-per-cent. currency loan of 60,000,000 milreis and a 5-per-cent. gold loan of £2,000,000 sterling. The interest on the foreign debt, by arrangement with the creditors, has been funded since July, 1898, and new 5-per-cent. bonds not exceeding £10,000,000 in amount have been issued to cover the defaulted interest and that of guaranteed railroads, which are £1,130,000 in arrears. The internal gold loans have been converted into currency loans.

The actual receipts for 1899 were approximately 266,000,000 milreis from customs, including 10 per cent. in gold reduced to currency and 111,000,000 milreis of internal revenue; total, 377,000,000 milreis. The ordinary expenditure was 250,000,000 milreis; currency destroyed, 45,000,000 milreis; balance of loan of 1897 paid, 33,000,000 milreis; total, 328,000,000 milreis. The bad financial situation that necessitated the funding loan has been remedied by curtailing expenditure and promoting an increase of revenue. A surplus has been accumulated to enable Government to resume the payment of interest on the external bonds in 1901 without resorting to fresh taxation. In 1900 the Government redeemed 71,000,000 milreis of paper currency, and in 1901 planned to redeem a larger amount. The surplus in the treasury at the end of the financial year was over 10,000,000 milreis in paper and 5,325,000 milreis in gold. The proportion of duties collected in gold, which had been increased from 10 to 15 per cent., was further raised to 25 per cent. in the budget for 1901. The external funded debt, when payment of interest is resumed on July 1, 1901, will consist of £3,292,000 of the loan of 1883, £5,298,600 of the loan of 1888, £18,388,200 of the loan of 1889, £7,331,600 of the loan of 1895, and £8,604,700 of the funding loan authorized in 1898; total, £42,915,100, requiring an annual payment of £1,921,324, in addition to which there is £169,405 of interest on the guaranteed loan of the Minas Geraes Railroad, £1,138,347 guaranteed to various railroad and other companies, £111,554 for the service of the gold bonds of 1879, and £20,328 of commissions, making the total annual gold payments £3,360,950. The internal funded debt on Jan. 1, 1900, was stated by the Finance Committee to be 634,933,100 milreis, not including 60,000,000 milreis authorized in 1897, but not issued. The floating debt is about 300,000,000 milreis. The inconvertible paper currency in circulation on June 30, 1900, was 705,000,000 milreis. The total internal indebtedness, not including floating liabilities, is 1,340,000,000 milreis, equivalent to £67,000,000 sterling at the exchange value of 1s. for the milreis, but if the milreis reached par the equivalent would be £150,750,000. Including the foreign debt and Minas Geraes Railroad loan and the floating debt, the total indebtedness of the Government is 1,969,077,000 milreis, the sterling equivalent of which at par is £236,231,160.

The fund accumulated in London for the resumption of interest payments was £875,760 on March 31, 1900, and by July 1, 1901, it will be increased from various sources to £5,628,046.

The estimates of ordinary revenue for 1901, as presented by the Minister of Finance, were 32,165,000 milreis in gold and 343,782,000 milreis in currency, to which are added 9,765,000 milreis in paper of extraordinary receipts, the fund of 25,820,000 milreis for withdrawal of currency, a currency guarantee fund of 8,028,667 milreis in gold, 12,678,074 milreis in gold from the emission of funding bonds, and 5,000,000 milreis in paper of balance of deposits, making a total of 58,869,741 milreis in gold and 284,367,000 milreis in paper. The estimates of expenditure were 15,784,415 milreis in paper for justice and interior, 965,500 milreis in gold and 520,920 milreis in paper for foreign affairs, 23,076,977 milreis in paper for marine, 45,518,523 milreis in paper for war, 12,857,814 milreis in gold and 60,569,986 milreis in paper for industry, and 21,976,470 milreis in gold and 95,648,540 milreis in paper for finance, making a total of 35,799,784 milreis in gold and 241,125,361 in paper, and leaving a balance of 23,069,957 milreis in gold and 43,241,639 milreis in paper.

The Army and Navy.—The strength of the active army in 1898 was 2,300 officers and 25,860 men. Military service is obligatory for three years with the colors and three years in the reserve. There is a National Guard, which has recently been reorganized and made more efficient. The number of gendarmes is 20,000. The army was reduced in 1899, and attention was given to training the nucleus of a new force.

The effective navy comprises 4 armor clads, 1 coast-defense gunboat, 5 monitors, 2 second-class cruisers, 2 third-class cruisers, 12 small cruisers and gunboats, and 8 first-class and 6 third-class torpedo boats. The torpedo cruisers Tamayo, Timbira, and Tupy, of 1,030 tons, built at Kiel, are the latest addition. The navy has been greatly improved, and by the end of 1901 the Government expects to have 23 ships ready for sea and 12 for river service.

Commerce and Production.—The Rio district produced 10,774,000 bags of coffee in 1898, 6,750,000 bags in 1899, and 7,250,000 bags in the season of 1900, each bag holding 60 kilogrammes. The sugar crop of Pernambuco in 1898 was 1,757,421 bags of 75 kilogrammes. The same state produced 167,198 bales of cotton, the bale weighing 75 kilogrammes. In Rio Grande do Sul the number of cattle slaughtered in 1898 was 340,000, and in 1899 only 270,000. The tanneries, breweries, and canneries of this state are important, and it has coal mines producing 18,300 tons in 1896. In Minas Geraes are gold mines, of which the output is 104,000 ounces. Here and in Bahia are the diamond mines of Brazil, the normal product of which has been 40,000 carats, but this has been increased since the sales from Cape Colony have been cut down. Gold, silver, lead, zinc, iron, manganese, copper, and quicksilver are found in Bahia, and iron ore in enormous quantities exists in Minas Geraes. The export of coffee from Rio de Janeiro in 1898 was 3,793,320 bags; from Santos, 5,745,210 bags; from Victoria, 379,911 bags; from Bahia, 329,725 bags; of sugar from Pernambuco, 1,757,421 bags; from Maceio, 639,584 bags; of cotton from Pernambuco, 167,198 bales; from Ceará, 8,000 bales; from Maceio, 7,375 bales; from Penedo, 40,000 bales; of rubber from Ceará, 1,008,317 kilogrammes; of hides from Bahia, 268,010; from Maceio, 5,807; from Pernambuco, 158,513; of tobacco from Bahia, 431,140 bales; of cacao from Bahia, 155,312 bags; of piassava from Bahia, 2,000,592 kilogrammes.

Navigation.—There were 1,218 vessels, of 2,069,161 tons, entered and 1,130, of 1,957,712 tons, cleared at the port of Rio de Janeiro in 1898; at Pernambuco, 887, of 1,106,556 tons, entered and 870, of 1,096,077 tons, cleared; at Ceará, 266, of 321,645 tons, entered and cleared; at Penedo, 182, of 34,998 tons, entered and 182, of 35,024 tons, cleared; at Parahyba, 192, of 183,587 tons, entered and 193, of 183,732 tons, cleared.

The mercantile navy of Brazil engaged in foreign commerce consisted in 1898 of 344 sailing vessels, of 88,000 tons, and 229 steamers, of 94,262 tons. There were 388 sailing vessels, of 26,037 tons, and 212 steamers, of 70,680 tons, engaged in 1897 in the coasting trade, which from the beginning of that year could only be carried on under the Brazilian flag.

Railroads, Posts, and Telegraphs.—The length of railroads open to traffic on Jan. 1, 1899, was 8,718 miles, besides which 4,989 miles were building, 4,670 miles more surveyed, and 8,440 miles projected. The Government guarantees 6 or 7 per cent. interest on most of the railroads.

The telegraph lines, which belong to the Federal Government, have a total length of 10,143 miles, with 21,936 miles of wire.

Political and Economic Conditions.—The abolition of slavery in 1887, the overthrow of the monarchy in 1889, the political turmoil that has prevailed most of the time since, the depression in the coffee trade, and recurring crises in the finances of the Government have tended to check the development of the resources of Brazil and weakened Brazilian credit at home and abroad. Only recently has a return to more settled conditions made possible a serious attempt in the direction of industrial expansion. During the last few years attention has been attracted to the mining industry. Brazilian diamonds, notwithstanding the purity of the stones, have not been systematically searched for during a quarter of a century until the increased demand for the gems while the output at Kimberley was interrupted reawakened interest in this branch of mining and enlisted foreign capital, which enables the work to be carried on with modern appliances. A French syndicate has begun operations on a large scale in the Diamantina district of the state of Minas Geraes, and intends utilizing the water power that is there available for hydraulic mining over an extensive area. Improved means of transport, a better supply of labor, and an abatement of local taxes on enterprise are conditions favorable to a commercial system of mining in this district where only superficial and desultory working has been the rule. Valuable finds of diamonds are also made from time to time in the state of Bahia, where the work is confined as yet to washing the river beds and no attempt has been made to work the diamantiferous ore systematically. Gold mining has been greatly neglected of recent years except by one or two well-established companies in Minas Geraes, although gold in paying quantities is found in many districts of Brazil. Plans for mining alluvial deposits hydraulically have been formed. The shipments of manganese ore have increased steadily for five years past. The supply is practically inexhaustible and the cost of mining it is less than in any other country. Iron ores, some of them exceptionally rich, are found in many sections, and coal is known to exist in considerable quantities; yet no attempt has been made to found an iron industry. The check on imports resulting from the scarcity of money and the heavy duties imposed in 1898 turned the balance of trade, which was \$22,000,000 against Brazil in 1897. This deficit has since been wiped out. This in combina-

tion with the redemption and incineration of large amounts of paper money by the Government has produced a marked rise in the exchange value of the paper milreis. The suspension of the payment of cash interest on the external national debt has helped to keep down foreign remittances and to keep the balance in favor of Brazil. This suspension of payments continues at least to July, 1901. From that date the payment of interest will be resumed if the agreement made with the bondholders in London in 1898 is kept. The rubber exports for the year ending June 30, 1900, were larger than in any former season, exceeding 26,000 tons. Although fears have often been expressed that the present wasteful method of collecting the gum is rapidly depleting the rubber forests of the Amazon, yet the supply has hitherto steadily increased, so vast are these forests and so rich in rubber-yielding trees. The amount of rubber collected for export is controlled only by the difficulty of obtaining laborers willing to brave the unhealthy climate and undergo the hardships incidental to this work, to which immigrants from Europe rapidly succumb. The larger export has been culled out by increased prices, but even still higher prices would fail to augment the yield except to a slight extent.

Brazil asked France and Italy to reduce their high duties on coffee by 30 per cent. France agreed to make a reduction of 10 per cent. and Italy one of 20 per cent. Congress was opened on May 3. The redemption of paper currency beyond the 78,000,000 milreis required by the funding loan contract was suspended in consequence of the rapid rise of exchange. In the summer the rate went up from 7*d.* to 14*d.* The price of coffee was almost double that of the preceding year. Congress voted a budget that authorized the Government to carry out any financial transactions except the emission of paper money. After the funding loan is terminated a gold credit is to be established to insure the punctual payment of the external debt charge.

The Anglo-Venezuelan boundary award made at Paris drew from the Brazilian Minister of Foreign Affairs a strong protest. When the arbitrators met the Brazilian Government made reservations as to the rights of Brazil which might be affected by the arguments of the contending parties; also that the silence of Brazil could not be invoked as an argument against the convictions held by the Brazilian Government with regard to its rights and its resolution to maintain them. Brazil was surprised when the tribunal issued its award fixing the boundary between Venezuela and British Guiana through territory in the upper reaches of the rivers Takuta and Cotinga, which the Government avers is Brazilian territory. Brazil has a treaty of delimitation with Venezuela dated May 5, 1859, by which it is stipulated that their common frontier shall follow the Pacaraima in such manner that the waters flowing toward the Rio Blanco shall belong to Brazil. The award of the international tribunal presumes that Venezuelan territory extends to the other side of the Cotinga and the Takuta, territory that is incontestably Brazilian, and also to the southern slopes of the Aca-ray chain, a district that is solely disputed against Brazil by France and is the subject of a controversy between these two countries that has been referred to the Swiss Federal Council for arbitration. Brazil agreed in March, 1899, to an arbitration of the boundary between its territory and British Guiana, and takes the position that the award of territory claimed by Brazil to British Guiana by the Venezuelan Boundary Commission can have no prejudicial effect in international law upon its claims.

BRITISH COLUMBIA, PROVINCE OF. Politics and Legislation.—The politics of the period in this province was exceedingly stormy. The Turner ministry, formed in 1895, had struggled along until 1898, when it was dismissed by Lieut.-Gov. McInnes and replaced by one under the nominal leadership of Mr. C. A. Semlin. The chief figure in the political conflicts of this time was the Hon. Joseph Martin. In Manitoba, from which he had migrated, he was the father of the famous measure abolishing separate schools, and he was the indirect cause of the defeat of the Dominion Conservative Government in 1896. As the year 1900 opened it found him an active member of the British Columbia Legislature and a bitter opponent of the Semlin Government, which then included Messrs. Alexander Henderson, R. E. McKechnie, F. Carter-Cotton, and J. Fred Hume.

On Jan. 5 the second session of the Eighth Legislature was opened by Lieut.-Gov. T. R. McInnes in a speech which dealt with the South African war, and promised in behalf of the Government various educational reforms; the substitution of a cash subsidy to the Central Pacific Railroad for the 2,500,000 acres of land previously granted in connection with the Columbia and Western extension; the grant of representation to the boundary district; and aid to various small railways. The session that followed was full of personalities and lacking in practical legislation on account of the Government's small majority and the fierce attacks of Mr. Martin. Finally the ministry was defeated, on Feb. 24, by 19 to 18 votes, and three days later were dismissed by the Lieutenant Governor. They had refused to resign, on the claim that a majority of the House was really with them, and they proved this during the ensuing period of turmoil by passing a resolution declaring: "That this House, being fully alive to the great loss, inconvenience, and expense to the country of any interruption to the business of the House at the present time, begs to express its regret that his Honor has seen fit to dismiss his advisers, as in the present crisis they have the efficient control of the House."

The Lieutenant Governor persisted in his policy, however, by calling in his friend, Mr. Joseph Martin, to form a ministry. For a month matters were in the most uncertain state. Martin could not get men of standing to join his ministry, and yet he held on to office and, at a later date, obtained a dissolution of the Legislature from the Governor. The House expressed its contempt of the latter by publicly insulting him when he attended its last meeting, on March 2, and by passing a unanimous resolution of want of confidence in Mr. Martin. Yet the new Premier went on with his work, and eventually made up a ministry composed of Messrs. Smith Curtis, J. Stewart Yates, and G. W. Beebe—all of whom were unknown to politics. In the elections that ensued his policy was announced in a manifesto, issued early in March, with the following platform:

"The abolition of the \$200 deposit for candidates for the Legislature.

"The bringing into force, as soon as arrangements can be completed, of the Torrens registry system.

"The redistribution of the constituencies on the basis of population, allowing to sparsely populated districts a proportionately larger representation than to populous districts and cities.

"The enactment of an accurate system of Government scaling of logs, and its rigid enforcement.

"The re-enactment of the disallowed labor regulation act of 1898, and also all the statutes of 1899 containing anti-Mongolian clauses, if disallowed as promised by the Dominion Government.

"To take a firm stand in every other possible way with a view of discouraging the spread of Oriental cheap labor in this province.

"To provide for official inspection of all buildings, machinery, and works, with a view to compelling the adoption of proper safeguards to life and health.

"The Government will continue to enforce the eight-hour law as it stands. An immediate inquiry will be made by the Minister of Mines into all grievances put forward in connection with its operation, with a view of bringing about an amicable settlement. If no settlement is reached, the principle of the referendum will be applied and a vote will be taken at the general election as to whether the law shall be repealed. If the law is sustained by the vote, it will be retained upon the statute book with its penalty clause. If modifications can be made, removing any of the friction brought about without impairing the principle of the law, they will be adopted. If the vote is against it, the law will be repealed.

"To re-establish the London agency of British Columbia, and to take every effective means of bringing before the British public the advantages of this province as a place for profitable investment of capital.

"The retaining of the resources of the province as an asset for the benefit of the people, and taking effective measures to prevent alienation of the public domain except to actual settlers or for *bona fide* business or industrial purposes, putting an end to the practice of speculating in connection with them.

"The taking of active measures for a systematic exploration of the province.

"To adopt a system of Government construction and operation of railways, and immediately to proceed with the construction of a railway on the south side of Fraser river, connecting the coast with the Kootenay District, with the understanding that unless the other railways now constructed in the province give fair connections and make equitable joint freight and passenger arrangements the province will continue this line to the eastern boundary of the province, proper connection with such Kootenay railway to be given to the Island of Vancouver. With respect to other parts of the province, to proceed to give to every portion of it railway connection at as early a date as possible, the railway, when constructed, to be operated by the Government through a commission.

"A railway bridge to be constructed in connection with the Kootenay railway across Fraser river, at or near New Westminster, and running powers given over it to any railway company applying for them under proper conditions.

"In case it is thought at any time advisable to give a bonus to any railway company, the same to be in cash, and not by way of a land grant; and no such bonus to be granted except upon the condition that a fair amount of the bonds or shares of the company be transferred to the province, and effective means taken to give the province control of the freight and passenger rates, and provision made against such railway having any liabilities against it except actual cost."

The unconstitutional nature of these proceedings was so glaring that it attracted the attention of the press all over Canada. An appeal was made to the Dominion Government to intervene, but Sir Wilfrid Laurier announced in Parliament that, though the matter was serious, the issue now lay in the hands of the people of the province, and he intimated that the Lieutenant Governor, as well as the Premier, would have to abide by the result. A little later he wrote to Mr. Martin that

he must expect no help from him in the contest at the polls, and thus practically withdrew the Liberal party from a fight in which Martin, as a life-long Liberal, might have expected a measure of party support. Meanwhile, although the Conservatives of British Columbia were in a greatly mixed-up condition and divided into supporters of Mr. J. H. Turner, Mr. C. A. Semlin, and Mr. F. Carter-Cotton, respectively and separately, they had proclaimed a platform for the province as follows:

"To revise the voters' lists.

"To aid actively in the construction of trails throughout the undeveloped portion of the province and the building of provincial trunk roads of public necessity.

"To provide for official inspection of elevators and hoisting gear.

"To improve the administration of justice and secure speedy disposition of legal disputes.

"To provide an effective system for settlement of disputes between capital and labor.

"To adopt the principle of government ownership of railways in so far as the circumstances of the province will admit, and the adoption of the principle that no bonus should be granted to any railway company which does not give the Government of the province control of rates over lines bonused, together with the option of purchase.

"To assume control and administration of the fisheries within the boundaries of the province.

"To assist actively by state aid in the development of the agricultural resources of the province.

"To make the London agency of British Columbia effective in proclaiming the natural wealth of the province and as a place for profitable investment of capital.

"In the interests of labor, the Conservative party sympathizes with and indorses the principle of an eight-hour law.

"To provide an improved system of education.

"To recognize and reform the system of provincial aid to medical men and hospitals in outlying parts of the province.

"To support actively the advancement of the mining interests of British Columbia.

"To aid in the immigration of female domestic servants."

For some months Mr. Martin fought hard to establish an organized party in support of his defined policy. But his personality was so peculiar, his abuse of opponents so violent, his energy so neutralized by mistakes, that in the elections, June 10, he was politically buried. Out of 38 members, only 7 Government supporters were returned, the rest being divided among the straight Conservative wing, the independent element, the Labor party, and those classed merely as oppositionists. Shortly afterward the Government resigned, and Lieut.-Gov. McInnes, in practical pursuance of the announced Dominion policy in the matter, received his dismissal from Ottawa. In the meantime he had called on Mr. James Dunsmuir, a millionaire mine owner, to form a ministry, and this was completed on June 21 as follows: Hon. James Dunsmuir, Premier and President of the Council; Hon. D. M. Eberts, Attorney-General; Hon. J. H. Turner, Minister of Finance; Hon. J. D. Prentice, Provincial Secretary; Hon. R. McBride, Commissioner of Lands and Public Works; Hon. A. C. Wells, Minister of Mines.

Three members of the Government were Liberals, 3 Conservatives, and with its formation and the retirement of Mr. McInnes came a period of comparative political peace. Sir Henri Joly de Lotbiniere, Minister of Inland Revenue at Ottawa,

was appointed Lieutenant Governor, and became immediately popular with all classes of the community. The dismissal of the Lieutenant Governor by the Dominion Government had been a serious action, and of course was much discussed. Important correspondence between Mr. McInnes and the Dominion authorities was made public, and on July 12 the Hon. David Mills, Minister of Justice, made a speech in the Senate, describing the constitutional mistakes and misdeeds for which the Lieutenant Governor had suffered.

On July 19 the first session of the Ninth Legislature was opened in state by Sir Henri Joly de Lotbiniere. Mr. J. P. Booth was elected Speaker, and the Lieutenant Governor then read his speech from the throne, which, after certain personal references and loyal expressions in connection with the South African war, continued as follows:

"The industries of the province are in a fairly prosperous condition, notwithstanding a temporary wave of depression. The metalliferous mining, which was more particularly affected, is resuming a more normal condition of activity, and I anticipate a largely increased output during the present year.

"Coal mining in East Kootenay and on Vancouver island is on a prosperous basis, the output for the past year exceeding that of any other year. The lumbering district is likewise in a prosperous condition, and the foreign demand continues to be active.

"Agriculture, including fruit growing, dairying, stock raising and kindred branches, is making steady progress, with prospects of ultimate great development.

"The fisheries last year were successfully prosecuted. It is too early in the season to indicate the results of the present year's operations.

"I observe that since the correspondence between the Government of British Columbia and the Federal and Imperial Governments, relative to Asiatic immigration, has been published a large influx of Japanese has taken place. The intention of my Government is to make strong representations to the authorities at Ottawa and Great Britain, with the view of protecting the interests of the laboring classes against consequences which threaten to come with an alarming increase in our Japanese population.

"The extensive requirements of the province with respect to public work for its development will involve the carrying out of a vigorous policy in road building, and my Government intends to provide for surveys and a report concerning the various sections requiring attention.

"I am impressed with the opportunities for the profitable carrying on of the manufacture of pulp in British Columbia, and note with pleasure that preparations are being made and sites arranged for extensive prosecution of this industry.

"My Government will ask for an appropriation for defraying the expenses of a commission to inquire into the working of the mining acts, with a view of introducing legislation for the purpose of amending them next session, and into the various conditions affecting the question of water rights. The intention of my Government is to impose a tonnage tax on the output of coal and coke in this province, and introduce other measures to be considered for the purpose of increasing the revenue.

"The intention of my Government is to provide in the estimates a sum to place the office of Agent General on a more satisfactory basis.

"Owing to the fact that the present extra session is for the purpose mainly of voting supplies, and that the regular session is to be held at an

early date, the measures to be submitted for your consideration, though important, will be few."

In the session that followed various important resolutions were passed. One of them urged the Dominion Government to settle the disputes regarding actual and ultimate ownership of Indian reserve lands in the province; another protested against the influx of Mongolian immigrants; another pressed for better payment of Dominion judges in the province; still another urged the establishment of a mint in British Columbia. A measure was also passed for helping the Kettle Valley Railway, which had been so bitterly opposed by the Canadian Pacific Railroad and refused incorporation by the Dominion Parliament. On Aug. 31 the House was prorogued with a speech from the Lieutenant Governor and his assent to the following, among other acts:

Respecting the closing of shops and the employment of children and young persons therein.

To incorporate the Vancouver and Westminster Railway Company.

To incorporate the Crow's Nest Pass Electric Light and Power Company, limited.

To incorporate the Western Telephone and Telegraph Company.

To incorporate the Pacific Northern and Omineca Railway Company.

To amend the investment and loan societies act.

To amend the Columbia and Western Railway subsidy act of 1896.

To amend the land registry act.

To amend the judgments act of 1899.

To amend the mechanics' lien act.

Relating to extra-provincial investment and loan societies.

To incorporate the Kamloops and Atlin Railway Company.

To amend the official administrators' act.

Respecting succession duties.

Relating to employment on works carried on under franchises granted by private acts.

To regulate immigration into British Columbia.

To permit the use of voting machines in British Columbia.

To amend the law relating to costs allowed to mortgagees.

To incorporate the Grand Forks and Kettle River Railway Company.

To amend the licenses act of 1899.

To levy a tax on coal and coke.

To amend the land act.

To amend the assessment act.

Finances.—On Aug. 16 Mr. J. H. Turner presented to the House his budget as Finance Minister. He pointed out that from 1893 to 1900 the provincial debt had increased about \$3,000,000, making it \$5,000,000 altogether. During this period \$4,500,000 had been expended on public works, the revenue had increased 90 per cent., and the expenditure only 40 per cent. The estimated revenue for 1900 was \$1,549,989; that for 1901 was \$1,757,239. The estimated expenditure for 1900 had been \$1,764,873, involving a deficit of over \$200,000; that for 1901 was \$2,220,388, involving a possible deficit of over \$460,000. Doubling the grant for public works was the chief cause of this increased expenditure.

The expenditures included \$372,000 on the public debt, \$341,000 on civil government and Department of Justice (salaries), \$67,000 on legislation, \$118,000 on maintenance of public institutions, \$70,000 on hospitals and charities, \$110,000 on the general administration of justice, \$326,000 on education, \$664,000 on public works, and the remainder on miscellaneous subjects.

The budget was received with general approval.

Labor Questions.—Matters connected with labor in a province where fishermen and miners are so large a part of the population naturally have a prominent place. Mr. Ralph Smith became this year the leader of the more staid labor element, as opposed to a rougher section under an agitator named McClain. Mr. Smith was elected President of the Canadian Trades and Labor Council at Ottawa, and in October resigned from the Legislature to contest a seat in the Dominion Liberal interest. There were several mining strikes, but the Fraser river strike was the most important labor event of the year. This arose nominally out of Japanese competition with white workingmen. The white fishermen, numbering about 4,000, demanded 25 cents a fish, and the cannery offered 20 cents, at which rate the Japanese, numbering 3,000 men, were willing to work. Much loss was incurred and bad feeling and violent action created before the issue was settled by a compromise, which was arrived at, in part, through the efforts of Mr. Bremner, the Labor Commissioner of the Dominion Government. Before that occurred, however, there were serious riots, and in July a large force of militia was sent to Steveston. Mr. Turner, the Finance Minister, in defending this action in the House, pointed out, that while the trouble might have been initiated by Japanese competition, yet it was greatly helped by the fact that 7,000 men were fishing where there was only room for half that number. Other factors were the competition of the Alaska and Oregon fisheries, the lowering in the price of salmon, and two bad years in succession for the canneries. After the strike was over a committee of the Assembly reported as follows concerning the situation and the necessity of sending militia into the disturbed district:

"In addition to the *bona fide* fishermen in Steveston there was a tough element from across the border which, aided by certain agitators, caused a state of excitement and unrest; that an organized effort was made to prevent any person from fishing until such time as the union fishermen should succeed in arriving at a price for fish satisfactory to them; that the justices of the peace were of opinion that had the militia not been called out there would have been serious disturbances of the peace in the event of the Japanese commencing to fish, with which disturbances, had they occurred, the provincial police admit they would have been unable to cope. On the other hand, there is conflict of evidence, some witnesses swearing that there was no reason to apprehend danger, while others swore that they believed there would be trouble in the event of the Japanese commencing to fish."

Mongolian Labor.—Intimately associated with the general labor situation, with political conditions, and even with imperial relations, was the question of Chinese and Japanese immigration. In the previous year measures prohibiting the entry of these people were passed, but were vetoed by the Dominion authorities at the request of Mr. Chamberlain, with the intimation that it was done on account of the exclusion applying to Japanese as well as Chinese. The provincial authorities refused to discriminate between the two races, and there was a practical deadlock at this point. On Aug. 28 the situation was explained from the British Columbian standpoint by the Legislature, in a resolution from which the following extract may be taken:

"That the wave of Mongolian immigration is increasing in volume at such an alarming rate that it threatens to overwhelm all the industries connected with the development of the natural re-

sources of the province, whether the fisheries, lumber, mineral, or agricultural; that during the first six months of the present year over 7,000 Japanese alone have landed on our shores, a number of whom, however, are said to have crossed to the United States; that out of a total population of say 200,000, or about 40,000 working white men, we have a probable Mongolian working population of 20,000. That the above proportion is continually being changed by a constant influx of these undesirable people and white immigration is deterred by dread of competition with them; and that the well-known low conditions of life under which the Mongolians live render it impossible for white men, with their higher standard of living, to compete successfully."

It was therefore proposed that the Dominion Government should legislate along lines similar to the Natal immigration act, which it was understood the imperial authorities did not consider hostile to Japan. Nothing, however, was done except in the appointment of a royal commission to investigate alleged grievances, composed of R. C. Clute, Q. C., of Toronto; Ralph Smith, M. P. P.; and Daniel J. Munn, of British Columbia. It was natural that in the ensuing Federal elections strong ground should be taken against the Dominion Government upon this point and upon the clause in a telegram from Sir Wilfrid Laurier in 1896, declaring that if he succeeded then, "the views of the Liberals in the west will prevail with me" regarding Chinese immigration.

The South African War.—Like all the provinces, British Columbia took an intense interest in this conflict. On Jan. 4 the speech from the throne, for which the Semlin Government was responsible, had declared with pride that the number of volunteers from the province in the various contingents had greatly exceeded those which imperial official arrangements made it possible to accept. The House had also passed a unanimous resolution offering a further contingent of mounted men, with expenses paid to Halifax. A large gathering in Victoria a few days later declared in favor of the Dominion Government's raising and equipping an armed force of 10,000 men for service whenever desired or needed by the Imperial Government. The latter proposition was approved by other Canadian cities. The legislative suggestion fell through, owing to the local political turmoil that almost immediately developed.

Mining.—On Aug. 28 the Hon. C. H. Mackintosh, chairman of the company, declared that there were 2,000,000 tons of gold ore in sight in the Le Roi mine alone. Despite labor troubles in the mining districts, the estimated production for British Columbia in 1900 was \$12,000,000, against \$4,000,000 in 1899. In the latter year the general mineral development had included a production of gold—placer and lode—to the value of \$4,202,473; silver, \$1,663,708; copper, \$1,351,453; lead, \$878,870; coal, \$3,862,396; coke, etc., \$376,655. Many drawbacks existed during 1899 and were continued into 1900. The labor deadlock in what was the most productive of the camps kept the rich deposits and immense fixed capital there unfruitful for the whole year. Another drawback felt by many of the camps was the handicap on home smelting. The Canadian and American tariffs worked together in favor of the American smelting industry, and American railway companies whose lines penetrate into southern British Columbia co-operated to give works across the line the preference. The development of the Atlin and Boundary districts was very marked in 1900, and one of the most important legislative enactments of the year was the removal, in February, of the

disabilities under which American miners had labored in those districts.

BULGARIA, a principality in eastern Europe under the suzerainty of Turkey, created an autonomous tributary principality by the Treaty of Berlin, signed July 13, 1878. Eastern Roumelia, which was created an autonomous province at the same time, in 1885 proclaimed its union with Bulgaria after expelling the Christian governor appointed by the Sultan, and has since been administered as a part of the principality, the Prince holding the title of Governor General by appointment of the Sultan of Turkey. The legislative body in Bulgaria is a single chamber called the Sobranje, containing 157 members, 1 to 20,000 of population, elected for five years by universal manhood suffrage.

The reigning Prince of Bulgaria is Ferdinand, Duke of Saxony, born Feb. 26, 1861, the youngest son of Prince August of Saxe-Coburg-Gotha and of Princess Clementine, a daughter of Louis Philippe, King of the French. The heir to the throne is Prince Boris, born Jan. 30, 1894. The Cabinet at the beginning of 1900 was composed of the following members: President of the Council and Minister of Foreign Affairs and Worship, T. Ivantchoff; Minister of Finance, M. Teneff; Minister of Justice, P. Pecheff; Minister of the Interior, Dr. V. Radoslavoff; Minister of Public Instruction, Dr. Vachoff; Minister of War, Col. S. Pafrikoff; Minister of Communications, T. Toncheff; Minister of Commerce and Agriculture, G. D. Nachovich.

Area and Population.—The area of Bulgaria proper is 24,380 square miles, and that of Eastern Roumelia, or South Bulgaria, is 13,700 square miles. The population of the entire principality in 1893 was 3,310,713, divided into 1,690,626 males and 1,620,087 females. Of the total number, 2,606,786 were Greek Orthodox, 643,258 Mohammedans, 28,307 Israelites, 22,617 Roman Catholics, 6,643 Armenians, 2,384 Protestants, and 718 undefined. The number of marriages in 1897 was 29,227, against 29,199 in 1896; of births, 149,631, against 143,255; of deaths, 90,134, against 84,076; excess of births, 59,497, against 59,179. Sofia, the capital, had 46,593 inhabitants at the census of 1893; Philippopolis, capital of Eastern Roumelia, 41,068.

Finances.—The revenue for 1899 was estimated in the budget at 84,097,195 francs, and expenditure at 84,035,514 francs. Of the revenue, 33,941,000 francs were derived from direct taxes and 31,951,000 francs from indirect taxes. Of the expenditure, 20,931,146 francs were required for interest and sinking fund of the debt, 22,623,224 francs for the army, 7,860,501 francs for the interior, 7,548,555 francs for public instruction, and 6,731,693 francs for public works.

The public debt in 1899 consisted of 40,071,000 francs outstanding of the railroad loan of 1888, 25,970,000 francs of the 6-per-cent. loan of 1889, 125,857,000 francs of the loan of 1892, and 9,700,000 francs unpaid of the Russian occupation debt; total, 201,958,000 francs, not including the Eastern Roumelian tribute, which is 2,951,000 francs a year, nor the Bulgarian tribute and share of the Turkish debt, which have never been demanded or determined according to the provision in the Berlin Treaty. In June, 1899, the Sobranje authorized the Government to convert and consolidate the entire national debt and to issue a new loan of 260,000,000 francs bearing 5 per cent. interest for this purpose.

The Army and Navy.—The Bulgarian army consists of 24 regiments of infantry of 2 battalions each and 12 reserve battalions; 3 regiments of

cavalry of 4 squadrons and 2 regiments of 5 squadrons; 6 regiments of artillery of 9 batteries of 4 guns each, and 9 mountain batteries; and 3 battalions of engineers, each of 4 companies, and 3 additional companies for railroad and telegraph service. In case of war the strength of the infantry battalion is brought up to 1,050 officers and men, and the number of battalions in the line and reserve is doubled, and each field battery has 6 guns, while the cavalry and the engineer corps have the same strength in peace or war. Every Bulgarian is liable for service from the age of twenty, and the term with the colors is two years in the infantry and in other arms three years. About 18,000 men are drawn annually out of 40,000 who are liable. The legal peace effective in 1898 was 2,500 officers and 40,555 men, with 7,400 horses. The theoretical war effective was 208,966 officers and men, with 38,788 horses and oxen and 432 guns. The infantry is armed with the Mannlicher magazine rifle.

Bulgaria has a naval force consisting of a steam yacht of 650 tons, a steamer of 800 tons, one of 600 tons, and one of 400 tons, a torpedo gunboat of 715 tons, and 2 armored gunboats for the Danube.

Railroads, Posts, and Telegraphs.—There were 835 miles of railroad in operation in Bulgaria and Eastern Roumelia in 1899, and 130 miles were under construction. The Government telegraphs had a total length of 3,259 miles, with 6,728 miles of wire. The telephone lines had a length of 915 miles. The number of telegraph messages sent in 1898 was 1,342,807. The post office carried 24,235,165 pieces of mail matter. The postal and telegraph receipts were 2,921,831 francs; expenses, 3,127,723 francs.

Commerce and Production.—The cultivators in Bulgaria pay a tenth of the produce in money or in kind to the Government. Of the whole surface of the country 48 per cent. is pasture land, 25½ per cent. under tillage, 17½ per cent. forest and heath, 3 per cent. meadow, 1 per cent. vineyards, and 5 per cent. roads, building land, and water. Over 70 per cent. of the people are engaged in farming, and most of the farmers own their holdings, from an acre to 6 acres. They raise wheat for export. Wine, tobacco, and silk are produced also, and the attar of roses made in Bulgaria goes all over the world. The country is well stocked with horses, cattle, sheep, goats, hogs, asses, and mules. The minerals belong to the Government, but the coal mines of Pernik, yielding 125,000 tons annually, the salt springs at Burgas, yielding 12,000 tons, and the stone quarries are the most valuable of the mineral industries, although iron ore is abundant and gold, silver, lead, manganese, and copper are found. Woolen and cotton cloth, linen, filigree, cigarettes, leather, and spirits are manufactured. The total value of imports in 1898 was 72,730,250 francs, and of exports 66,537,007 francs. The imports of textile goods were 21,955,629 francs in value; groceries, 5,354,898 francs; metals and metal manufactures, 10,722,336 francs; timber and wood manufactures, 4,131,573 francs; machinery and implements, 5,099,438 francs; hides, skins, and leather, 3,953,205 francs. The exports of cereals were 48,491,343 francs; textiles and textile materials, including cocoons, 3,018,152 francs; live stock, 3,515,598 francs; animal food products, 3,377,468 francs; hides and skins, 2,687,657 francs; attar of roses, 2,591,754 francs. Other exports are cheese, eggs, tobacco, timber. The commercial class is made up of Jews, Roumanians, Greeks, and Austrians. Wheat is exported to Great Britain, Belgium, Turkey, Germany, Austria, and France. The total commerce

of 1898 was divided among different countries as shown in the following table, giving values in francs:

COUNTRIES.	Imports.	Exports.
Austria-Hungary	20,454,821	9,684,805
Great Britain	17,898,080	10,841,708
Turkey	7,444,885	16,614,067
Germany	9,890,544	7,181,431
Belgium	8,716,259	8,963,788
France	4,310,986	7,149,860
Italy	2,707,815	2,250,648
Russia	3,160,410	121,983
Roumania	1,852,396	597,320
Greece	550,088	1,396,881
Servia	814,491	674,661
Netherlands	122,116	739,508
United States	897,009	806,390
Switzerland	566,191	9,480
Sweden and Norway	61,476	.....
Other countries	162,087	518,623
Total	72,730,250	66,587,007

Navigation.—The number of vessels entered at Bulgarian ports during 1898 was 9,926, of 2,780,545 tons; cleared, 9,873, of 2,771,331 tons.

Crimes against Roumanians.—The Roumanian Government and people, by taking an interest in the Koutzo-Wallachs of Macedonia and promoting their education in their own language, introduced a new factor into the Macedonian question, and one not calculated to smooth the way for the Macedonian Revolutionary Committee at Sofia, which aims at uniting the Macedonian provinces to the Bulgarian principality. Among the Bulgars, Greeks, Serbs, and Albanians who inhabit European Turkey the Wallachs form a comparatively small element. It is the view of their representative men that a peaceful development of the country under Turkish rule, subject to European supervision, is better for them than absorption in a great Bulgaria would be, in which case their separate nationality would soon be extinguished and the political and economic conditions in no wise improved. This view is shared and has been encouraged by the Roumanian Government, which is not only interested from racial sympathy in the fate of the Wallachs of Turkey, but has an equal interest with Servia and Greece in holding Bulgarian aspirations in check. These aspirations, although the Government and the dynasty in Bulgaria have given them free rein, not wishing to incur unpopularity by repressing the Revolutionary Committee, which represents the national ideal, are no longer encouraged by the Pan Slavists of Russia, and the money which the agitators once drew from that source has been cut off. In the spring of 1900 the Roumanian Government complained to the Government at Sofia that Roumanians resident in Bulgaria were threatened and blackmailed by officers and members of the Revolutionary Committee. Outrages were committed against some of the leading Roumanians who make the capital of Bulgaria their home, yet nothing was done by the authorities to bring the perpetrators to justice. The terrorists even extended their operations to the Roumanian capital, where two persons marked out for vengeance were assassinated. Both of these were Bulgarians by birth. The first note from the Roumanian Government received scant attention from the Government of Prince Ferdinand, which sent a very unsatisfactory reply. Shortly afterward a more serious crime than any that had preceded it was committed. Prof. Mihaileano, the occupant of an official position under the Roumanian Government, was murdered in Bucharest. The crime was clearly one of political revenge, for no one had done more than its victim to antagonize the secret society at Sofia

that the Bulgarian Government seemed disposed to screen. Political assassination has been practiced in every stage of Bulgarian history, but never with such frequency and impunity as under the rule of Prince Ferdinand. Prof. Mihaileano was a Macedonian by birth, the son of Roumanian parents. He had taken a prominent part in the press discussion of the future of Macedonia, boldly controverting the Bulgarian claim to ascendancy and counseling the Wallachs to make the best of Ottoman rule. After his murder the Roumanian Government sent a second note, accompanied by a threat to appeal to Turkey as the suzerain power over the principality to put an end to the intolerable reign of lawlessness by suppressing the Revolutionary Committee. This extorted a more conciliatory reply from Sofia. The Bulgarian Government, however, demanded proofs before proceeding against any of the persons suspected of the crime. The judicial investigation at Bucharest brought out facts tending to show that Dimitroff, the assassin, had 7 accomplices, one of whom was Saratoff, the president of the secret committee in Sofia. Most of the accused were in Bulgaria or elsewhere, safe over the border. Nevertheless, their trial was ordered to take place in Bucharest. One was a Roumanian by birth, although of Bulgarian race, and his extradition was requested. The Roumanian Government collected evidence also concerning acts of extortion and incitements to murder which it connected with the Macedonian Revolutionary Committee, and this evidence, together with the correspondence that had passed between the two Cabinets, was submitted to all the great powers. It was ascertained that in the previous winter a loan had been raised by the Macedonian committee to which Bulgarians residing in Bucharest were subscribers, and that not only Saratoff and other officers of the committee were concerned in this, but probably Gen. Nikolaieff, Prince Ferdinand's aid-de-camp. Threatening letters were received from Bulgaria predicting the assassination of the judge conducting the inquiry in Bucharest, the Roumanian Minister of Foreign Affairs, and even of King Carol. The Austrian, German, and Italian Cabinets, in response to the Roumanian request, addressed representations to the Bulgarian Government, and the Russian Government probably gave similar advice, in accordance with which the Bulgarian Cabinet, while complaining of the sharp tone of the Roumanian notes, promised to investigate the charges of blackmail and intimidation. The murder of a Roumanian named Karadjoff in Sofia the Bulgarian Government ascribed to private revenge, and not to political motives. This explanation the Roumanian Government refused to accept. Before the incident was closed by the commencement of judicial proceedings military preparations were begun in Bulgaria and mobilization of the Roumanian forces was threatened. On the border of Macedonia revolutionary bands were drilled by Bulgarian officers. Still no fear was felt in Europe of a Macedonian rising so long as the Ottoman Government maintained a strong and alert garrison in Macedonia. Following the example of Roumania, Servia placed before the powers a list of crimes attributed to the Macedonian Revolutionary Committee of which Servians were the victims.

In the beginning of May the authorities had difficulty in quelling a riot which broke out among the peasantry in the vicinity of Rustchuk, the cause of which was the oppressive action of the police. The first soldiers who were sent to the scene were disarmed by the rioters, as the police had been before them, and a concourse of two or three thousand peasants had gathered to march

upon Rustchuk, when they were dispersed by several battalions of soldiers.

CALIFORNIA, a Pacific coast State, admitted to the Union Sept. 9, 1850; area, 158,360 square miles. The population, according to each decennial census since admission, was 92,597 in 1850; 379,994 in 1860; 560,247 in 1870; 864,694 in 1880; 1,208,130 in 1890; and 1,485,053 in 1900. Capital, Sacramento.

Government.—The following were the State officers during the year: Governor, Henry T. Gage; Lieutenant Governor, Jacob H. Neff; Secretary of State, Charles F. Curry; Comptroller, Edward P. Colgan; Treasurer, Truman Reeves; Attorney-General, Tiley L. Ford; Surveyor General, Martin J. Wright; Superintendent of Public Instruction, Thomas J. Kirk; Superintendent of Printing, Alfred J. Johnston; Adjutant General, W. H. Seaman; Commissioner of Labor, F. V. Meyers; Railroad Commissioners, E. B. Edson, C. S. Laumeister, N. Blackstock; Board of Equalization, Alexander Brown, R. H. Beamer, Thomas O. Toland, Lewis H. Brown; Commissioners of the Supreme Court, Wheaton A. Gray, James A. Cooper, E. W. Britt, who resigned in April; Building and Loan Commissioner, Frank H. Gould; Bank Commissioners, John Markley, A. W. Barrett, B. D. Murphy; Chief Justice of the Supreme Court, W. H. Beatty; Associate Justices, T. B. McFarland, C. H. Garoutte, R. C. Harrison, Walter Van Dyke, F. W. Henshaw, Jackson Temple; Clerk, George W. Root. The officers elected in 1898 were candidates on the Republican ticket except T. O. Toland and W. Van Dyke, who were candidates of the Fusionists. Justice Temple is a Democrat.

Population.—The population of the State has increased since 1890 by 276,923, or 22.9 per cent. A small portion of this increase is due to the fact that there were 5,107 Indians and 161 other persons, on Indian reservations, etc., in California, who were specially enumerated in 1890 under the provisions of the census act, but were not included in the general population of the State.

Of the 57 counties, all but 11 have increased during the decade. The population by counties is as follows:

COUNTIES.	1900.	1890.	COUNTIES.	1900.	1890.
Alameda.....	130,190	98,864	Riverside....	17,897	.....
Alpine.....	609	667	Sacramento..	45,915	40,839
Amador.....	11,116	10,320	San Benito....	6,638	6,412
Butte.....	17,117	17,889	San Bernar- dino.....	27,929	25,496
Calaveras....	11,200	8,882	San Diego....	35,090	34,987
Colusa.....	7,346	14,640	San Fran- cisco.....	342,782	298,997
Contra Costa	18,046	18,515	San Joaquin..	35,452	28,629
Del Norte....	2,408	2,592	San Luis.....	.....	.....
El Dorado....	8,966	9,282	Obispo.....	16,637	16,072
Fresno.....	87,882	32,026	San Mateo....	12,604	10,087
Glenn.....	5,510	.....	Santa Bar- bara.....	18,984	15,754
Humboldt....	27,104	28,469	Santa Clara..	60,216	48,006
Inyo.....	4,377	3,544	Santa Cruz... Shasta.....	21,512 17,318	19,370 12,133
Kern.....	16,480	9,908	Sierra.....	4,017	5,051
Kings.....	9,991	.....	Slakiyou....	16,962	12,163
Lake.....	6,107	7,101	Solano.....	24,143	20,946
Lassen.....	4,511	4,239	Sonoma.....	38,480	32,721
Los Angeles.	170,298	101,454	Stanislaus... Sutter.....	9,550 5,886	10,040 5,469
Madera.....	6,364	.....	Tehama.....	10,996	9,916
Marin.....	15,720	13,702	Trinity.....	4,383	3,719
Mariposa....	4,720	3,787	Tulare.....	18,875	24,574
Mendocino... Merced.....	20,465 9,125	17,612 8,085	Tuolumne.... Venturo.....	11,166 14,367	6,088 10,071
Modoc.....	5,078	4,996	Yolo.....	13,618	12,684
Monterey.... Napa.....	2,167 19,890	2,002 18,637	Yuba.....	8,620	9,636
Nevada.....	16,451	16,411			
Orange.....	17,789	17,369			
Placer.....	19,696	13,589			
Plumas.....	15,786	15,101			
	4,687	4,983			

There are 116 incorporated towns and cities in California, for which the population in 1900 is separately returned. Of these 46 have a popula-

tion in 1900 of more than 2,000, 19 over 5,000, 10 over 10,000, and 4 over 25,000, namely, San Francisco with 342,782, Los Angeles with 102,479, Oakland with 66,960, and Sacramento with 29,282 inhabitants. The population of San Francisco, beginning with 56,802 in 1860, increased to 149,473 in 1870, or 163.1 per cent. For the three succeeding decades there has been a normal increase, and the present population is more than six times what it was in 1860. The population of Sacramento has increased from 6,820 in 1850 to 13,785 in 1860, or 102.1 per cent., and at present is more than four times as great as it was in 1850. The population of Oakland, starting with only 1,543 in 1860, increased to 10,500 in 1870, or 580.4 per cent., and to 34,555 in 1880, or 229 per cent. It now has a population of 66,960, or more than 43 times as many inhabitants as it had in 1860. The population of Los Angeles was 1,610 in 1850; in 1880 it was 11,183, but during the decade from 1880 to 1890 it increased to 50,395, or 350.6 per cent., and during the decade from 1890 to 1900 to 102,479, or 103.3 per cent.

In the two years ending Nov. 1, 1899, new fourth-class post offices to the number of 166 were established in the State.

The other cities having more than 5,000 are: San José, 21,500; San Diego, 17,700; Stockton, 17,500; Alameda, 16,464; Berkeley, 13,214; Fresno, 12,470; Pasadena, 9,117; Riverside, 7,973; Vallejo, 7,965; Eureka, 7,327; Santa Rosa, 6,673; Santa Barbara, 6,587; San Bernardino, 6,150; Santa Cruz, 5,659; Pomona, 5,526.

Valuations.—The valuations of property in the State, as given in the Comptroller's official report for this year, amounts to \$1,218,292,457, made up as follows: Value of real estate, \$660,905,988; improvements on real estate, \$272,447,321; personal property, \$184,380,015; money and solvent credits, \$43,847,378; railroads, \$47,711,755. The rate of State taxation is 49.8 cents.

The original assessed value of mortgages is \$156,444,755; the assessed value of university and other State mortgages, \$1,180,985. The total county indebtedness is \$3,629,379.40, of which \$3,502,700 is funded.

The total valuation this year is \$24,527,684 greater than in 1899. There is a falling off in the amount of solvent credits and money, and, on the other hand, a decrease in the value of mortgages amounting to \$4,416,237. Mortgages have increased during the year in those sections of the State only where the rains last winter were scant and the people have not fully recovered from the effects of a series of dry seasons.

The funded and floating debts of counties have been reduced. Many counties have made expensive improvements, but without incurring new debts.

Education.—The State University graduated a class of 353 in May. "It was the first time in the history of Berkeley that the gowns appropriate to the various collegiate degrees had been worn by the entire faculty, and the draped satin, velvet, and silk indicative of so much erudition and academic distinction made the parade down the campus a long-to-be-remembered feature of this gala day of the college year. The graduating class wore the plain black silk undergraduate gowns, but there were tasseled mortar boards, flowing sleeves, and low-hanging silk hoods that represented every degree given in America and nearly every noteworthy institution of learning in this country, besides many of England's and Germany's universities. The gowns of university graduates were trimmed in velvet, the bachelors being distinguished by long, pointed sleeves and three-foot

hoods; the masters by full square sleeves and three-and-one-half-foot hoods; the doctors by sleeves of three velvet bars, gold tasseled mortar boards, and four-foot hoods. The color of the outside of the hood in each instance shows the department in which the degree is granted, white designating letters or arts; blue, philosophy; yellow, science; green, law; and purple, medicine. The inside of the hood displays the colors of the university at which the degree was granted." Of 49 appointments made in the year 1899-1900, 31 are of graduates of the university.

A tract of 20 acres adjoining the campus is to be added to the grounds, and a part has already been bought. Hearst Hall will be moved to the new ground, and fitted up as a gymnasium for the woman students. Mrs. Jane K. Sather has given about \$100,000 to the university for a chair of Classical Literature and a law library, to become available at her death; in the meantime she is to receive the income of the property, which the regents are to invest. Mrs. Hearst has made provision for a series of archaeological explorations in Egypt, Greece, Etruria, South and Central America, Mexico, and California, under charge of the university.

At the Wilmerding school 140 boys are learning trades. A building has been erected and equipped with machinery, at a cost of \$60,000.

The graduating class of the normal school at San José in June numbered 86.

The corner stone of a memorial chapel was laid at Stanford University, Jan. 29. A course of lectures on horticulture was given to the fruit growers of the State during the week of Feb. 19-24, at Stanford.

The experience of California in publishing its own schoolbooks is thus set forth: "Our appropriations from taxation to date for this purpose have been, for plants \$466,000 and for 'compilation' \$40,000, total \$506,000, for which we have to show a worn-out plant and a lot of book plates which could not be sold to anybody except as old metal. In the meantime for all these years we have been paying for books which, for the most part, no school would take as a gift, unless, like our schools, they were compelled by State law to use them, at prices decidedly higher than the best books in the world can be obtained for in the open market."

Banks.—From a table made up from the returns of the Bank Commissioners in the past ten years it is learned that the amounts on deposit in all the banks of the State has risen from a total of \$171,229,531.61 in 1890 to \$279,838,089.35 in 1900. There has been an increase every year except in 1893-'94, when there was a falling off of \$2,395,841.49. The increase from July 1, 1899, to Aug. 11, 1900, was \$22,973,693.88. The amount on deposit in savings banks was \$98,442,007.01 in 1890; it had risen to \$145,943,102.59 in 1899, and to \$158,167,402.61 in 1900, with 214,250 individual depositors.

Militia.—The organized military force of the State, as given in the figures of the Adjutant General's office, is 4,202 men; the number of men liable for service, but unorganized, 211,991.

Railroads.—The first through passenger train over the recently completed Santa Fé system from Chicago to San Francisco arrived at the latter place June 30.

The suit of the Railroad Commissioners to compel the Southern Pacific to observe the order of the commission in the Fresno rate case (see Annual Cyclopædia for 1899, page 97), was decided against the company in June, in the Superior Court. The case will be ended, however, only by the decision

of the Supreme Court, and possibly only by that of the United States Supreme Court.

In 1899 175 miles were added to the railroads in the State, and in the first six months of 1900 the added mileage was 122.

Products.—The gold product of the State in 1899 was given at the mint as approximately \$15,335,031, and silver \$504,012. The silver is given at its commercial value; its coining value was \$1,106,573.

The returns to the mint show the employment of 18,701 miners in the gold, silver, lead, and copper mines of the State, a decrease of 1,122 compared with the previous year.

The copper product was estimated unofficially at about \$4,000,000, and the oil at \$3,000,000. The entire value of the base metals and inferior minerals was estimated at \$13,976,969. The oil industry is rapidly becoming one of the most important in the State.

The sowings of sugar beets were reported at 42,300 acres. The wheat crop was an average one, estimated at 30,833,333 bushels; barley, 20,782,608 bushels; hops, 8,325,000 pounds; wool, 29,500,000 pounds; raisins, 66,000,000 pounds; prunes, 96,500,000 pounds; canned fruit, 2,900,000 cases. The nut crop of southern California, mostly walnuts, was estimated at 450 car loads.

Public Lands.—The slow rate at which surveys of lands in the State are made, while those in other States are carried on with vigor, is a public grievance, especially with settlers on the unsurveyed lands. A bill passed Congress in March providing for the preservation of the big trees. The State has received, by bequest of Col. J. B. Armstrong, between 400 and 500 acres of redwood forest, adjacent to Guerneville, for a public park.

Public Works.—The report that has occupied the Débris Commission since 1896 was presented to Congress in February. Two projects are spoken of in the report. That of 1899 is the one approved by the commission, the chief of engineers, and the Secretary of War. It consists of a series of dams constituting restraining barriers and forming impounding reservoirs in and about and above and below De Guerra point, in extent 2,000,000 acres of settling basin, with lateral outlets, and calculated to impound 50,000,000 cubic yards of *débris*. The project likewise touches upon the plan of the confining of the Yuba river below the works to a single channel. The report estimates the cost of constructing the works at present advised at \$800,000.

A new contract has been made for the construction of the San Pedro breakwater.

San Jacinto Mountain.—A dispatch of March 19 from San Jacinto said: "Tremendous excitement prevails in San Jacinto, it having been discovered that part of San Jacinto mountain has slipped into a subterranean cavern. A territory covering 60 acres, at an elevation of 4,000 feet, was dislodged by the Christmas earthquake, and slipped 150 feet lower than it had stood for many centuries. The face of this new valley is thickly traversed with fissures and cracks varying in width from 1 inch to 6 feet across, and it is not possible to see the bottom nor to sound the depths by throwing stones into them."

Legislative Session.—As no Senator was chosen at the regular session in 1899, a special session was called this year and continued from Jan. 28 to Feb. 10. Thomas R. Bard was made the nominee of the Republicans and was elected Feb. 6, receiving the full Republican vote, 85. James D. Phelan was the Democratic nominee.

Other purposes for which the session was called, as named in the Governor's proclamation, and the

disposition made of bills embodying them, are summarized as follows:

To re-enact the law creating a Commissioner of Public Works. Law re-enacted on lines proposed in the proclamation.

To enact a law relative to an auditing board for the Commissioner of Public Works. Law enacted as proposed in the proclamation.

To repeal the wide-tire law of 1897. Law repealed.

To repeal the act of March 27, 1897, relative to the location of mining claims. Law repealed.

To amend section 3494 of the political code, relative to the sale of public school lands. Bill defeated.

To empower the Governor to remove summarily all public officers appointed by or under his authority. Bill defeated.

To empower the Governor to suspend for cause during recess of the Legislature appointees subject to confirmation by the Senate. Bill defeated.

Constitutional amendments relating to the judicial department, providing for three district courts of appeal, and to municipal charters were adopted. Concurrent and joint resolutions adopted were: Asking Congress to make appropriation for roads in Yosemite National Park; favoring election of United States Senators by the people; favoring American manufacture of the proposed Pacific cable; favoring the completion of public surveys; opposing the Jamaica reciprocity treaty; asking Congress to prevent fraud in the location of oil lands; asking action of the Government on the report of the Débris Commission.

Political.—No State officers were elected this year, their term of office being four years. Conventions were held to choose delegates to the national conventions and to nominate presidential electors.

The Republicans approved the national and State administrations, favored the construction of the Nicaragua Canal under Government ownership, appropriations by Government for reclamation and irrigation of arid lands with co-operation of the States, establishment of national forest reserves, prevention of fraud in acquirement of mineral lands, continuance of the Chinese exclusion laws, road improvement, increased appropriations to the State University, and adoption of the proposed amendment for regulation of primary elections.

The Democrats adopted a platform approving the Chicago platform, favoring the candidacy of William J. Bryan, favoring an amendment to the Federal Constitution to require the election of United States Senators by direct popular vote; demanding a similar amendment providing for the income tax; favoring the immediate construction, control, and protection of the Nicaraguan Canal by the United States; extending sympathy to the South African republics; condemning imperialism; condemning the Porto Rican tariff law; affirming that the Constitution follows the flag; favoring the abolition of all unnecessary war taxes; condemning the trusts; favoring the passing of laws for the exclusion of all Asiatic laborers and congratulating the Democracy on the selection of W. R. Hearst to be president of the National Association of Democratic Clubs. On State matters, the resolutions called for preservation of the redwoods, rehabilitation of hydraulic mining, storage reservoirs, increase of university revenues, reduction of hours of labor for minors, and election at large of railroad commissioners.

In the Legislature the Republicans have 34 members of the Senate and 59 of the House; the Democrats, 6 of the Senate and 21 of the House.

Eight constitutional amendments were proposed by the General Assembly, and submitted to vote at this election. They were:

To exempt from taxation buildings used solely and exclusively for religious worship and the land on which they are built.

To assure the perpetuity of Stanford University, which is believed to be in danger either from defects in the original law or the deeds of gift, and to enable it to receive property by legacy and to hold property outside the State of California, and to authorize the Legislature by special act to exempt the property of the university from State taxation and the Palo Alto farm and the personal property from county and municipal taxation upon condition that tuition be made absolutely free to residents of California. The amendment itself makes no exemption of taxation, and the Legislature could pass no such law which could not be repealed. The funds of the university are now invested in United States bonds and so pay no taxes.

To exempt from taxation the property of the Lick School of Mechanical Arts on condition that the trustees make annual reports to the Governor.

To exempt from taxation all bonds hereafter issued by the State or any political subdivision or district thereof.

To make possible the enactment of a primary election law.

To make the salaries of superior judges payable entirely by the State, instead of half by the counties, as now; to provide for the appointment of as many salaried stenographers as there are superior judges; and to make salaries of supreme judges payable monthly.

To permit Vallejo and San Francisco to pay certain indebtedness.

To make changes in the judicial system, the principal one of which is the creation of three new appellate courts, in order to relieve the Supreme Court, the decisions of the courts of appeal being made final in the majority of cases.

The total vote for presidential electors was 303,793, compared with 296,503 in 1896. Of this, the Republican candidates received 164,755; the Democratic, 124,985; the Prohibitionist, 5,024—a Republican majority of 34,746.

Semicentennial.—The fiftieth anniversary of the admission of California to the Union was celebrated Sept. 9-12.

Saturday and Sunday yacht races and regattas were held on the bay. Saturday night there was a magnificent naval parade on the water front, in which the battle ship Iowa and the Naval Reserve steamship Marion and a large fleet of tugs, launches, and other craft participated, and in which the big four-masted sailing vessel May Flint took an involuntary part by colliding with the Iowa and other vessels at anchor and then plunging to the bottom of the harbor, where she now lies. On Sunday afternoon Claus Spreckels's gift of a grand band stand at Golden Gate Park was one of the features of the day. Monday the greatest parade ever witnessed in San Francisco passed over the principal streets, and on Tuesday the festivities closed with a variety of special features. The celebration attracted visitors by the tens of thousands. The city was smothered in bunting, and the street decorations and illuminations were never before equaled in the city.

CANADA, DOMINION OF. Legislation and Politics.—The history of Canada in 1900 includes two all-absorbing issues—the South African war and the general elections. Public sentiment was deeply and continuously stirred by the former; legislation and politics were greatly affected by

the latter. The Parliament met in its last session at Ottawa, Feb. 1, and was opened by the Earl of Minto as Governor General. The Government of Sir Wilfrid Laurier was practically unchanged from its composition of the preceding year, and was composed of himself as President of the Council; Sir Richard Cartwright, Minister of Trade and Commerce; Hon. R. W. Scott, Secretary of State; Hon. David Mills, Minister of Justice; Sir L. H. Davies, Minister of Marine and Fisheries; Hon. F. W. Borden, Minister of Militia and Defense; Hon. William Mulock, Postmaster-General; Hon. S. A. Fisher, Minister of Agriculture; Hon. J. Israel Tarte, Minister of Public Works; Hon. R. R. Dobell, minister without portfolio; Hon. W. S. Fielding, Minister of Finance; Hon. A. G. Blair, Minister of Railways and Canals; Hon. Clifford Sifton, Minister of the Interior; Hon. W. Paterson, Minister of Customs; Sir H. Joly de Lotbiniere, Minister of Inland Revenue; Hon. James Sutherland, minister without portfolio. Later in the year Sir Henri Joly retired to take the lieutenant governorship of British Columbia, and was succeeded by Hon. M. E. Bernier.

Lord Minto's speech from the throne, describing the general situation and outlining the ministerial programme for the session, contained these passages:

"Hostilities having unfortunately broken out, during the recess, between Great Britain and the South African Republic, it appeared to my ministers expedient to anticipate the action of Parliament by equipping and forwarding two contingents of volunteers to the seat of war as a practical evidence of profound devotion and loyalty of the entire people of Canada to the sovereign and institutions of the British Empire. In addition to the contingents sent by the Government, another Canadian force is being organized and dispatched at the personal expense of the High Commissioner of Canada. I have been instructed to convey to you her Majesty's high appreciation of the loyalty and patriotism thus displayed, which, following the preference under the present tariff to articles of British manufacture, has had the happiest effect in cementing and intensifying the cordial relations subsisting between Canada and the mother country. A bill will be submitted for your approval, making provision for the cost of equipping and paying the Canadian contingents.

"The measures which have been taken from time to time to facilitate the safe transportation of foodstuffs to European markets have resulted in a large increase in the exportation of several important articles of produce, and it may become necessary in the interest of this very important branch of industry to require a more careful inspection than has been customary, for the purpose of maintaining that high standard of excellence heretofore secured, and which is absolutely indispensable if the people of Canada are to increase their large and profitable trade with other countries in these commodities.

"I am glad to observe that the returns from the Post Office Department afford good ground for believing that the temporary loss of revenue caused by the great reduction recently made in the letter postage will speedily be made good by the increased correspondence consequent thereon.

"Negotiations are now in progress with several of our sister colonies in the West Indies which it is hoped may result in increasing and developing our trade with those islands, and possibly with certain portions of the adjacent continent of South America.

"It gives me great pleasure to observe that, in pursuance of a policy which was defined at the

last session of Parliament, a carefully devised body of regulations has been adopted, applicable to all railways and public works within the Federal jurisdiction, making adequate provision for the sanitary protection and medical care of workmen.

"The attention of the Government has been called to the conflicts which occasionally arise between workmen and their employers. While it may not be possible wholly to prevent such difficulties by legislation, my Government think that many of the disputes might be avoided if better provisions could be made for the friendly intervention of a board of conciliation—the conclusions of which, while not legally binding, would have much weight with both sides, and be useful in bringing an intelligent public opinion to bear on these complicated subjects. You will be invited to consider whether the provincial legislation in this matter may not be usefully supplemented by an enactment providing for the establishment of a Dominion tribunal for assisting in the settlement of such questions.

"I am happy to observe that the number of settlers who have taken up lands in Manitoba and in the Northwest Territories is larger than in any previous year, and affords conclusive evidence of the success which has attended the efforts of my Government to promote immigration, and I have no doubt that the greatly increased production of the West will henceforth add materially to the growth of the trade of the whole Dominion. While the efforts made to secure increased population for the West have thus been successful, much attention has also been devoted to the repatriation of Canadians who in less prosperous times have left Canada. You will be pleased to learn that this work has been attended with satisfactory results.

"I am pleased to say that our canal system, connecting the Great Lakes with the Atlantic seaboard, has been completed so as to allow vessels having a draught of 14 feet to pass from the head of Lake Superior to the sea. The vigorous and successful prosecution of these works by my Government has already attracted the attention of those interested in Western transportation, and there are good grounds for the hope that when the necessary facilities for quick and inexpensive handling of ocean traffic are provided, and which are in progress, Canadian ports will control a much larger share of the traffic of the West.

"Measures will be introduced to renew and amend the existing banking laws, to regulate the rate of interest payable upon judgments received in courts of law, to provide for the taking of the next decennial census, for the better arrangement of the electoral districts, to amend the criminal code and the laws relating to other important subjects."

In the ensuing session the issues connected with or growing out of the South African war were the most interesting, and will be discussed elsewhere.

On Feb. 9 Mr. Mulock reintroduced in the House the redistribution bill which had been rejected by the Senate in 1899, and which aimed, according to the Liberal contention, at remedying the inequalities and injustice of the "gerrymander act" of 1882, and, according to the Conservative belief, at making a new gerrymander which would keep the Liberal party in power for another term of years. The plan proposed was to restore, nominally, the old county boundaries, and to create a board of high court justices to divide the constituencies accordingly. The Conservatives also opposed the measure as improper and unnecessary just before the decennial census, which is to be taken in 1901, and which would involve another readjustment

of constituencies. This view was embodied in an amendment by Sir C. Tupper, and rejected by 45 to 91 votes. After passing the Commons the measure was again thrown out by the Senate on a vote of 41 to 19. In connection with this and other evidences of the Conservative character of the Senate, the agitation of previous years in favor of the reform of that body entered upon one of its periods of fitful activity, and the Liberal press joined in a fierce attack upon the upper house. Events, however, tended to show that the hand of death would soon change its composition if the Government remained in power, and during this very year several vacancies were filled by the appointment of Liberals—notably Hon. Joseph Shehyn, of Quebec; Hon. Finlay Young, of Manitoba; Hon. Charles Burpee, of New Brunswick; Hon. George T. Fulford, of Ontario; Hon. J. P. B. Casgrain, of Quebec; and Hon. Robert Watson, of Manitoba.

In the course of the session evidences of corruption and irregularity in by-elections in Huron and Brockville were brought home very strongly to Liberal representatives, and hot debates and charges ensued. Early in June the Government decided to appoint a judicial commission to investigate alleged fraudulent practices at elections. The commissioners were Sir John A. Boyd, Chancellor of Ontario; Hon. W. G. Falconbridge, of the Ontario High Court of Justice; and B. D. McTavish, County Court Judge of Carleton, Ontario. Mr. Justice Falconbridge was soon afterward promoted to a chief justiceship without the Conservative Opposition even hinting at the possibility of his views being influenced by such action. The commissioners were given a pretty free hand, and the power of summoning witnesses under oath. The Opposition held, however, that their powers were only on the surface, and in a proposed amendment declared that the provisions of the act were not sufficiently comprehensive. The proposal to widen the scope of the commission was voted down on a party division.

On July 18 the session was formally closed by the Governor General in a speech from the throne, which briefly and succinctly outlined the legislation passed, from the Government's point of view. He said:

"I desire to congratulate you on the buoyant state of the revenue. The large receipts have enabled my Government to provide liberally for the public service and to maintain Canada's strong financial position. The improvements of the act relating to banks will tend to perfect a system of banking of which Canada has reason to feel proud. The extension of the British preference in our tariff will tend to reduce the burden of taxation and stimulate the growth of every trade with the mother country. The measure you have passed respecting the admission of Canadian inscribed stock to the list of securities in which trustees in Great Britain may invest is being followed by similar legislation in the Imperial Parliament, which will in due course consummate this very important improvement in the financial affairs of the Dominion. I particularly congratulate you upon the passing of the conciliation act, which, it is confidently hoped, will not only improve the condition of the industrial classes, but will also better promote the relations which ought to exist between capital and labor."

By-elections in the early part of the year had resulted in a Conservative victory in Sherbrooke, Quebec; the choice of an Independent-Liberal, supported by the Conservatives, in Winnipeg; and the success of an Independent-Liberal in Lotbinière, Quebec, over the Government candidate.

In February Mr. W. F. Maclean, M. P., editor and proprietor of the *Toronto World*, published the following platform, which he has since continued to press, and many planks of which are approved by the Conservative party. Some, however, such as nationalization of telegraphs and public ownership of franchises, are new to party platforms:

1. Rounding off confederation by taking in Newfoundland.
2. Imperial federation and preferential trade between the sections of the empire.
3. Protection to Canadian industries and a reciprocity of tariffs as between us and those who tax Canadian products. Export duties sufficient to compel the manufacture in Canada of Canadian logs, woods, pulp, ores, metals. Customs duties or bounties sufficient to build up a great iron industry in Canada.
4. State-owned cables between Britain and Canada, and between Canada and Australia.
5. Nationalization of the Canadian telegraph and telephone systems as a part of the post office.
6. A national fast Atlantic service between the nearest available Canadian and British ports.
7. Canadian railways to have their Atlantic terminals in some Canadian port.
8. Maintenance of the independence of the Canadian national railway (the Intercolonial), and its gradual extension westward. This national railway to be the complement of the fast Atlantic service.
9. A strong and impartial railway commission to regulate rates and the relations of railways one with the other and with municipalities and individuals.
10. No railway subsidies without corresponding control and ownership of the roads subsidized.
11. A federal insolvency law.
12. Laws to regulate trusts, corporations, trade combinations, and holders of patents in their treatment of the public.
13. Extension of the principle of public ownership and control to all public franchises within provincial and municipal jurisdiction.

As the electoral conflict approached the press teemed with references to the policies and performances and promises of the two parties. The Government, or the Liberal party, held that during its four years of power an immense amount of useful legislation had been enacted and the country greatly helped in its path toward prosperity and nationality within the broad bounds of the British Empire. Their claims may be summarized as follows: The settlement of the Manitoba school question; the reduction of the tariff; the granting of a preference to Great Britain; sending of Canadian volunteers to South Africa; the vigorous development of transportation facilities; the establishment of imperial penny postage; the establishment of the postal-note system; the placing of the Intercolonial railway on a paying basis; the abolition of land grants to railways; the gaining of valuable concessions from existing railways and the control of freight rates and running powers over all new roads; the opening up and establishment of liberty, law, and order in the Yukon, without cost to the Dominion; the abolition of the franchise act; the repeal of the superannuation act; the attempted repeal of the "gerrymander act" of 1882; the abolition of the sweating system in Government contracts; the securing of the concession by the British Parliament allowing British trust funds to be invested in Canadian securities; the securing of the abolition of the United States quarantine regulations, which increased the export of cattle to the United States from \$8,870 in 1896

to \$1,173,000 in 1899; the establishment of a system of cold storage for the transportation of our products to Great Britain; the reservation of Dominion lands for the settler and not for the speculator.

The Conservative view of the issues involved can not be better outlined than in the following denunciation of the Government, contained in the *Montreal Gazette* of June 16 and repeated in various forms from a thousand platforms:

It broke a contract for fast Atlantic mail service to put the St. Lawrence on a level with New York, and it proved itself unable to make another.

It broke an arrangement by which the Crow's Nest Pass Railway was to have been constructed for \$1,600,000, and made another that cost the country \$3,600,000.

It bought from a political supporter, at a price far above its cash cost, the Drummond County Railway, and then bonused another railway to take trade away from it.

It made a contract, without tenders being asked, for the construction of a railway into the Yukon country, pledging as a bonus millions upon millions of square miles of land in the great gold-bearing region, a contract so bad that the whole people revolted against it.

It filled the Yukon country with officials whose conduct was so scandalous that the greatest journal of opinion in England said the relations between people and rulers in that section of the British Empire were everything that they should not be.

It refused a public independent inquiry into the conduct of these officials, though charges were made against them by name on the floor of Parliament by a member of the Privy Council.

It bungled its tariff legislation so that Canadian grain was shut out of the German market.

It instituted a splurge preferential tariff system from which Canada has not received, and can not receive, any commercial advantage, and which can not be made effective of its intended purpose except at the risk of Canadian industries.

It put an insulting "no precedent" proviso in the order in Council authorizing the dispatch of Canadian soldiers to the war in South Africa.

It compounded cases of customs fraud which had been brought into the courts, and this against the protests of straightforward importers and merchants.

It appointed unqualified men, and men who had been condemned by the courts as political corruptionists, to important places of trust and emolument.

It spent tens of thousands of dollars in paying partisan commissions for going about the country looking through the public service for employees who had voted against its party candidates.

It raised millions more by taxation than its members had declared the people could bear, and spent ten millions more a year than they had pledged themselves to show was sufficient for the needs of the country.

It established the system of giving contracts without tender to political friends, who sublet the work, at a profit to themselves and a loss to the country, to men not capable of doing it.

It forced two qualified commanders of the militia to throw up their positions in disgust at the ideals and methods of its administration of the country's armed forces.

On Oct. 9 Parliament was dissolved, the nominations to be on Oct. 31 and the elections on Nov. 7. The country was at once in a political turmoil, although the issues were really not very serious. Sir Charles Tupper, the veteran Conservative lead-

er, now in his eightieth year; Mr. Hugh John Macdonald, Premier of Manitoba; and Mr. George E. Foster, long Finance Minister in the preceding Conservative Government, made a tour of the country and were well received. Sir Wilfrid Laurier, Mr. Fielding, and other members of the ministry did the same, with a similar result. In the Parliament thus dissolved the Government had a majority of 59, which had grown up, through successful by-elections, from about 30 majority obtained at the polls in 1896.

Mr. Foster left his previous constituency and joined issue, in St. John, N. B., with Mr. Blair, whose position as a Cabinet minister with a previous Liberal majority of more than 600 made the result appear almost hopeless for the Conservative leader. Mr. H. H. Cook, ex-M. P., long a well-known Liberal in Ontario, issued a manifesto denouncing his party upon an indictment containing 17 counts, and declaring them guilty of corruption and absolutely indifferent to their pledges of previous years. He also charged the Government with offering him a senatorship in return for a \$10,000 contribution to party funds. This Sir W. Laurier promptly and earnestly denied. The other charges were not answered by the Liberal leader. Mr. John Charlton, also a prominent figure in the same party, issued an address to his constituents supporting parts of the Conservative platform and condemning portions of the Liberal record. Sir Mackenzie Bowell, a former Conservative premier, revived the internal party troubles of 1896 by going to the constituency of Hon. J. G. Haggart, a former colleague of his own and of Sir C. Tupper, and denouncing him with vigor. And so the contest proceeded, both parties in favor of closer British unity, but differing strongly in detail. The preferential tariff was a prominent feature, Sir Charles Tupper declaring that the Government should have invited reciprocity from England, and expressing the belief that such a result was possible. This the Government denied strenuously, and in doing so certainly had the record of English free-trade policy for fifty years. Mr. Tarte's alleged anti-British utterances made another strong card for the Conservatives, and each party accused the other of trying to raise racial issues in Quebec.

The general result of the struggle, Nov. 7, was somewhat extraordinary. The Laurier Government was sustained by a majority of about 50. The great bulk of this was from Quebec, which gave a total of 57 Liberals to 8 Conservatives. Ontario turned a Liberal majority of 14 into a Conservative majority of more than 20. The maritime provinces increased their previous Liberal majorities somewhat, and Manitoba, the Territories, and British Columbia divided about equally. All the ministers were re-elected from comparatively safe seats; nearly all the Conservative leaders, including Sir Charles Tupper, Hon. George E. Foster, Hon. Hugh John Macdonald, Sir Adolphe Caron, and J. G. H. Bergeron were beaten in trying to carry Liberal constituencies, or from spending all their time speaking throughout the country. The French of Quebec voted almost solidly for a French-Canadian Premier, while the French in some of the Ontario and Manitoban constituencies, and the Acadian-French in all the maritime provinces, apparently did the same. The day after the election Sir Charles Tupper announced his retirement from public life.

Canada in the South African War.—Including the Royal Canadian Regiment of 1,000 men under Col. W. D. Otter, the Canadian Mounted Rifles under Lieut.-Col. F. L. Lessard, the Royal Canadian Dragoons under Lieut.-Col. T. D. B. Evans, and the Strathcona Horse under Lieut.-Col.

S. B. Steele, there were about 3,000 Canadian troops in South Africa by January, 1900. There had been some hesitation in sending the first contingent, and for this the Government had to meet severe party denunciation during the ensuing year. Popular opinion forced its dispatch by having an order in Council prepared which formally announced that the action taken should not be considered a precedent, which was promptly broken through in the sending of a second and a third contingent. Lord Minto hinted at this situation when he said, in a speech of farewell at Quebec to departing troops, that "the Canadian contingent goes out because you" (the people of Canada) "insisted upon its going." This matter, and the fact that in Quebec the Liberal leaders said they had "allowed" the volunteers to go, while elsewhere they declared with pride that they "sent" them, held a large place in the subsequent elections.

The Government paid for the equipment of the contingents and their transportation to the Cape, and after that they became British soldiers and subject to similar rates and rules. In February Mr. Fielding introduced into the House a vote of \$2,000,000, which was carried almost unanimously, for the payment of these expenses and for an increase in the regular army remuneration of the men, to be given to them on their return. The Strathcona Horse was equipped and all expenses borne by the personal generosity of Lord Strathcona, Canadian High Commissioner in London, who also privately arranged through Sir Charles Tupper for an insurance of \$1,000 each on the lives of the men in the first contingent. Tributes to the conduct of the Canadian troops were numerous, and included the direct congratulations of the Queen, Lord Roberts, Sir Alfred Milner, and Mr. Chamberlain, and praise from almost the entire British press. It appears to have been a revelation of what colonial volunteers could do. At Paardeberg 13 men were killed and more than 30 officers and men were wounded. Parliament promptly expressed its gratulations to the living and its sympathy for the dead and wounded in a dispatch sent by the Premier. After this time the Royal Canadians were brigaded with the Gordons and other crack British regiments, and on July 16 Gen. Smith-Dorrien issued the following congratulatory order:

"The Tenth Brigade has achieved a record of which any infantry might be proud. Since the date it formed, namely the 12th of February, it has marched 620 miles, often on half rations and seldom on full. It has taken part in the capture of 10 towns, fought in 10 general actions, and on 27 other days. In one period of 30 days it fought on 21 of them, and marched 327 miles. The casualties have been between 400 and 500, and defeats nil."

During the progress of the campaign the regiment marched more than 1,000 miles. Most of its members returned in October, 1900, and received an enthusiastic greeting. In the year from October, 1899, to the same month in 1900, the Canadian losses were 61 killed or died of wounds, 180 wounded, 43 died from disease, and 52 were missing or prisoners—a total of 336. On June 7 the Premier moved in the House of Commons, seconded by the Opposition leader, an address to the Queen, which included the following paragraph:

"The feelings of pride and satisfaction with which we hail every fresh addition to the long and the glorious roll of deeds wrought by British valor and resource are enhanced on the present occasion by the proud consciousness that, through the active operation of her sons on the battlefield,

Canada is entitled to share in a new and special manner in the joy of the present triumph. We rejoice that the conflict now happily drawing to a close will result in the removal of those disabilities under which many of our fellow-subjects have labored for so long, and we can not doubt that the extension of your Majesty's gracious rule over the whole of South Africa will be attended by those blessings which flow from a wise and beneficent administration of just and equal laws."

The attitude of the French-Canadians during the conflict and its imperialistic developments was a most important matter. There was undoubtedly much of sympathy at first with the Boers, and of a sort of passive deprecation of the British position. As time passed on, and Sir W. Laurier continuously proclaimed his belief in the justice of the war and was joined by French Conservative leaders such as Casgrain, Chapais, and Bergeron, this feeling was modified. Mr. Tarte's peculiar attitude, however, produced a new complication, while two Liberal members of Parliament—Bourrassa and Monet—inaugurated a distinct campaign against any kind of participation in the affairs of the empire and in favor of Canadian independence. On March 12 Mr. Henri Bourrassa introduced the following resolution in the Commons:

"That this House insists on the principle of the sovereignty and the independence of Parliament as the basis of British institutions and the safeguard of the civil and political liberties of British citizens, and refuses, consequently, to consider the action of the Government in relation to the South African war as a precedent which should commit this country to any action in the future. That this House further declares that it opposes any change in the political and military relations which exist at present between Canada and Great Britain, unless such change is initiated by the sovereign will of Parliament, and sanctioned by the people of Canada."

This was voted down by 119 to 10 and was chiefly important as producing an eloquent speech from Sir W. Laurier in condemnation of its general tone, in the course of which he declared that should Canada be compelled to participate in all the wars of Great Britain it would have the right to say, "If you want us to help you, you must call us to your councils."

Outbreaks of this sentiment occurred from time to time during the year in an extreme form. One was the appearance of an article in *La Semaine Religieuse*, the organ of the Quebec archbishop, denouncing the British. Other papers took, upon occasion, a similar line. In each case, however, the result was assurances of loyalty from the highest quarters, and in the first-mentioned instances most ultra-British speeches from Archbishop Bégin and Lieut.-Gov. Jetté of Quebec. Mr. Tarte's utterances in France during the Paris Exposition took the form of asserting continually that he was French by origin and birth and sentiment but British in loyalty. His position in this respect became the subject of wide discussion and keen hostility in Ontario.

Canada and the Empire.—Apart from the war, many imperial issues demanded attention in 1900. In June the Fourth Congress of the Chambers of Commerce of the Empire drew forth a large representation from Canada, and discussions in which the Dominion held a foremost place. Resolutions were passed in favor of closer commercial and defensive relations and the appointment of a permanent Imperial Council. In March the Montreal Board of Trade passed a series of resolutions favoring a similar policy, which was approved by bodies of the same importance all over the country.

Complications arose in connection with the proposed Pacific cable, created by the rivalry of the eastern extension system in Australian waters. Resolutions of protest were passed by the Senate, and explanations were offered in the Commons by Mr. Mulock. Eventually the contract was let by Mr. Chamberlain, and toward the end of the year the various colonial interests in the matter appear to have been harmonized. In the British war loan of £30,000,000 sterling, Canadians subscribed many millions of dollars, notably \$5,000,000 by the Bank of Montreal, and were allotted a fair proportion.

Sir Charles Tupper delivered a speech in Quebec early in the year, in which he strongly opposed colonial representation in the Imperial Parliament, and this was directly replied to by Mr. Chamberlain, on April 3, in a speech in which he said: "So far the colonies have not made any definite suggestion with respect to representation; and I am convinced that nothing would be more fatal than a premature discussion of details. I do not think the time has arrived to suggest to the colonies the form which imperial unity should take."

An outcome of the war was the Canadian offer to relieve the regular forces at Halifax, and the creation of a special provisional regiment of volunteers for the purpose. A practical result of the sentiment aroused in England by Canadian aid in this connection was the formation in July of a Lord Mayor's fund to help the sufferers from the Ottawa fire, and the contribution of about \$200,000 for the purpose.

The preferential tariff of the Government came in for keen discussion, and on the whole may be said to have commanded popular approval. The manufacturers, however, found fault with the increase from 25 to 33½ per cent., and their association passed resolutions in favor of a reciprocal preference, of protection high enough to guard their interests, and of protest against certain reductions, notably that upon woolen goods. They also urged a more careful adjustment of duties to suit special cases. This idea of reciprocity was not only the principal platform in Sir Charles Tupper's political policy, but was strongly urged by the Boards of Trade in Montreal, Toronto, and Halifax. The Canadian Manufacturers' Association passed the following resolution on July 11:

"That in the opinion of this association the bonds of the British Empire would be materially strengthened and the union of various parts of her Majesty's domains greatly consolidated by the adoption of a commercial and fiscal policy for the colonies of Great Britain, based upon the principle of mutual preference whereby each component part of the empire would receive a substantial advantage in trade as a result of this national relationship; that this is a singularly opportune time to look to the adoption of this policy in two of the largest of her Majesty's colonies; and, therefore, that the Dominion Government be urged to take such steps as may be possible to bring about the adoption of this policy by the sister colonies."

In Parliament, Mr. Fielding's proposed increase of the British preference to 33½ per cent. was chiefly opposed by the Conservatives on the ground of giving something for nothing and helping to prevent the obtaining of future reciprocal British concessions. It was supported by Liberals as not only granting a preference, but as involving a steady lowering of the protective tariff. It passed, as a matter of course. The Conservative attitude was summarized on March 30 in the following resolution, presented in the House by Sir Charles Tupper:

"That this House is of opinion that a system of mutual trade preference between Great Britain

and the colonies would greatly stimulate increased production in and commerce between these countries, and would thus promote and maintain the unity of the empire; and that nothing which falls short of the complete realization of such a policy should be considered as final or satisfactory."

Militia and Defense.—The record of this department's work was necessarily largely connected with the war. The minister came in for some very severe criticism, but his dispatch of nearly 3,000 officers and men to South Africa, and of another thousand to Halifax, with the details of their equipment and transport, entailed much work and responsibility, and was upon the whole well done. Dr. Borden, speaking in the Commons on June 26, pointed out what he had done and what he intended to do in the following words:

"Since he had been in office annual drill had been adopted; a limit was placed upon the period of command for corps; an age limit had been established for officers; cadet corps in connection with high schools and the regiments of militia had been formed; steps taken to form an engineers corps in connection with the universities of Montreal and Toronto; a completed scheme of defense for the Dominion; and an army medical service upon the British model, modified to meet the requirements of the Canadian service, has been formed, and will be increased until a complete medical service for an army corps of 30,000 has been provided. Mounted infantry was to be inaugurated. An experiment will be made in the Northwest and Manitoba, and the cavalry and infantry converted into mounted infantry."

One scandal did undoubtedly disgrace his administration of affairs, and the purchase of some "emergency food" for the troops, at a high rate, which was found to be practically useless, created much discussion in Parliament and the press, and was investigated by a parliamentary commission which on June 28 issued majority and minority reports, in which the Liberals practically cleared the minister of responsibility, while the Conservatives proclaimed him inefficient and corrupt.

The expenditure of the Militia Department for 1899 was \$2,489,551. That for 1900 would include the whole of the South African war expenses, and be at least double this sum.

Finances.—Mr. W. S. Fielding, as Finance Minister, presented his budget to Parliament on March 23. It was stamped with the evidences of good times and redundant revenues, and its programme included free trade between Canada and the island of Trinidad—an arrangement which subsequently fell through; the free admission of machinery used in the manufacture of beet-root sugar; an increase from 25 to 33½ per cent. in the tariff; preference given to British goods; the statement that the Imperial Government had at last consented to the listing of Canadian Government securities as an investment for trust funds; and the announcement of a surplus of more than \$4,800,000. In his speech Mr. Fielding declared that the past fiscal year had been the most prosperous in Canadian history; that the revenue had been \$46,741,249, the expenditure \$41,903,500, and the surplus \$4,837,749. The minister then continued as follows: "The capital expenditure for the year amounted to \$9,137,562, and, deducting surplus, sinking fund, and like charges, the net increase of the debt last year was \$2,317,047. The average increase in the public debt from 1878 to 1896 was \$8,503,075, and in the last three years \$2,502,000—a considerable diminution under the present Government. Of the expenditure of the last three years, \$2,500,000 was for obligations entered into by the last Government, and if this amount were deducted the aver-

age annual increase under this administration was about \$1,700,000. What had the country got for all this? Taking the four classes of expenditure—for canals, public works, the Intercolonial railway, and the railway subsidies—the expenditure for the three years ending with July 1, 1899, was \$16,667,500, compared with \$14,351,433 for the three years before that. As to the present fiscal year, of which eight months had elapsed, he estimated that the total revenue would pass \$50,000,000."

On June 26 the supplementary estimates were brought down to the House, consisting of grants to harbors and rivers, public buildings, railways, and canals, and sundry Yukon expenditures. The total was \$7,244,135. The figures of revenue, as finally announced, for the fiscal year ending June 30, 1900, included \$28,102,751 from customs, \$9,817,121 from excise, \$3,098,410 from the post office, \$5,173,544 from public works, and \$2,842,770 from miscellaneous sources—a total of \$49,034,597. In the matter of the expenditures on capital account, there was an increased outlay of \$629,216 upon public works, railways, and canals, from \$4,699,692 in 1898-'99 to \$5,328,908 in 1899-1900. There was an increase in the outlay upon Dominion lands from \$140,126 in 1898-'99 to \$191,469 in 1899-1900. These, together with an item of \$1,372,707 for the South African contingent, were the only items of increase in capital expenditures as compared with the previous year. Over against these increases there was in the outlay for railway subsidies from \$3,194,302 in 1898-'99 to \$724,388.73 in 1899-1900—a decrease of \$2,469,914. This decrease, together with several minor items, made a total reduction in the expenditure on capital account of \$518,714—from \$8,318,181.86 in 1898-'99 to \$7,799,467.11 in 1899-1900.

Agriculture.—The crops of 1900 were generally good and prices fair. The production and export of butter largely increased in 1899, and the total was 20,000,000 pounds, an increase of 100 per cent. over the preceding year. The exports of cheese fell off a little, and amounted to 189,827,000 pounds. In his annual report, the Minister of Agriculture stated that Canadian eggs were gaining favor rapidly in England, and referred to experiments which were going on for the growth of apples in the Northwest. Considerable advance was made in the fattening and export of poultry. The value of the total export of butter in 1899 was \$3,700,873; of cheese, \$16,776,765. Nearly all this went to Great Britain. The export of cattle to Great Britain was \$7,129,430, and to the United States \$1,298,170. The total export of horses showed a decrease and was only \$898,063 in value, but sheep increased slightly and were valued at \$1,540,857, the bulk of which went to the United States. The total export of provisions was \$32,460,844, nearly all of which went to Great Britain.

An interesting appendix to the minister's annual report was a statement by Prof. McEachran regarding disease in animals. He declared that tuberculosis was rapidly decreasing: "Hog cholera, although it occasionally breaks out, is also on the decrease, and has disappeared almost entirely in several of the hitherto most infected centers. Scab in sheep is unknown in the maritime provinces, and exists to but a limited extent in Ontario. One outbreak near McLeod, in Alberta, was stamped out by the voluntary destruction of the flock by the owner. Another flock was similarly dealt with in a district northeast of Calgary. No scab was discovered in the 62,308 sheep inspected prior to export from Canada to England, and only 2 of the animals were reported affected by the disease on their arrival in England. Mange exists

to considerable extent among the range cattle of Alberta and Assiniboine."

Banks.—This year was marked by the decimal consideration of the bank act. The changes were not many and the revision of the charters was largely formal. On May 22 Mr. Fielding introduced the subject in the House, and declared that the present act had been found reasonably satisfactory. "The present bank charters expired in 1901, and they proposed by this bill to extend them for ten years, or until 1911. There were new provisions in regard to bank notes, designed to prevent the issue of notes by a bank after its suspension. It was desirable, in the light of the experience of recent years, that a better supervision of the affairs of the banks, when the bank suspended, than now existed should be provided. They believed that the best medium for doing this was by using the services of the Canadian Bankers' Association, and for that purpose they had asked the association to become incorporated."

The bank circulation on Dec. 31, 1899, was \$49,588,236, and the circulation of Dominion notes \$27,076,309—a joint increase of \$10,000,000 over the same date in 1898. The bank clearings in Toronto, Montreal, Winnipeg, Hamilton, Halifax, and St. John were \$1,549,960,696, showing an increase of \$250,000,000 in the year. The discounts in chartered banks on Jan. 31, 1900, were \$301,000,000, or \$18,000,000 more than in June, 1899. The deposits in chartered and savings banks had increased in the same period from \$308,000,000 to \$321,000,000.

Trade and Commerce.—The figures for the year ending June 30, 1900, showed a phenomenal increase in trade. The total exports amounted to \$175,656,947, an increase over 1896 of \$46,440,165. The items included products of the mine, \$14,106,764; products of the fisheries, \$11,303,028; products of the forest, \$30,050,018; animals and their products, \$55,897,800; agricultural products, \$27,429,121; manufactures, \$13,692,773; miscellaneous, \$339,413.

The goods entered for consumption were valued at \$183,209,273, compared with \$154,051,593 for the previous year. In the fiscal year 1899 the total trade was \$308,388,968; in 1900 it was \$358,866,220.

Labor Matters.—The approach of the general elections naturally brought labor interests into prominence, and especially as the Government made strenuous efforts to conciliate this particular class in the community. A commission was appointed in September, composed of Messrs. R. C. Clute, Q. C., Daniel J. Munn, and Ralph Smith, to investigate and report upon the Chinese immigration trouble in British Columbia. Legislation was passed forming a Department of Labor at Ottawa, under the administration of Mr. Mulock, Postmaster-General, and a paper was established under its auspices entitled the *Labor Gazette*. A conciliation act was passed, dealing with the settlement and prevention of trade disputes by conciliation and arbitration. On March 22 Mr. Mulock introduced, and the House passed, the following resolution, which the Opposition designated as a piece of buncombe, but did not otherwise oppose:

"That it be resolved that all Government contracts should contain such conditions as will prevent abuses which may arise from the subletting of such contracts, and that every effort should be made to secure the payment of such wages as are generally accepted as current in each trade for competent workmen in the district where the work is carried out, and that this House cordially concurs in such policy and deems it the duty of the Government to take immediate steps to give effect thereto. It is hereby declared that the work to which the foregoing policy shall apply includes not

only work undertaken by the Government itself, but also all works aided by the grant of Dominion public funds."

The Conservatives declared, on the other hand, that the alien labor law was not enforced; and that while Americans were working at will in this country, Canadians were still excluded from employment on the other side of the border.

Several strikes occurred during the year, the chief ones being that of the Fraser salmon fisheries in July, the machinists on the western division of the Canadian Pacific Railroad in August, and the troubles at the Valleyfield cotton mills in Quebec in August.

Mining.—The steady increase of mineral production in Canada has been one of the chief incidents in its recent development. The output of 1890 was \$16,000,000; that of 1896, \$22,000,000; 1897, \$28,000,000; 1898, \$38,000,000; and for the year ending Dec. 31, 1899, it was as follows: Copper, \$2,655,319; gold (Yukon District, \$16,000,000; all other, \$5,049,730), \$21,049,730; iron ore, \$248,372; lead, \$977,250; nickel, \$2,007,840; platinum, \$835; silver, \$1,834,371—total metallic, \$28,833,717; total nonmetallic, \$18,141,795; total mineral output for 1899, \$47,275,512.

With exception of a slight falling off in the value of asbestos, the chief minerals showed considerable advances, both in amount and value.

Fisheries.—In 1900 changes in fishing regulations were made necessary by the decision of the Judicial Committee of the Imperial Privy Council, which handed the control of inland water fisheries over to the provincial governments. The system of administration was not greatly altered, and the chief change was in the appointment of officials by the provincial authorities. The fishery statistics of the Dominion are always behind in publication: the latest figures, those for 1898, show a catch valued at \$19,667,126, a decrease of \$3,000,000 from the unprecedented figures of 1897 and an approximation to the usual average.

The chief commercial fishes were lobster, with a valued production of \$3,887,939; salmon, \$3,159,306; cod, \$2,996,583; herring, \$1,987,454; and mackerel, trout, haddock, whitefish, sardines, smelts, hake, halibut, pickerel, oysters, etc. The Canadian sealing catch in Bering Sea for 1899 showed an increase on the two preceding years, and amounted to 34,454 seals. The Dominion Government expenditures for 1899 upon the fisheries was \$417,610, which included \$34,522 spent upon fish culture, \$105,133 upon the protective service, and \$159,459 as fishing bounties. In 1898, 80,000 men were engaged in the fisheries, with boats, nets, etc., valued at \$9,860,000. There were 1,150 schooners, manned by 8,657 sailors, and 72,877 fishermen using 38,675 boats.

Prohibition.—The year opened with a general feeling of disappointment among prohibitionists throughout the Dominion regarding the Laurier Government's refusal to act upon the small majority given to the proposal in the plebiscite of 1898. In March the Dominion Council of the Royal Templars of Temperance accepted a report which spoke of this fact in no uncertain terms. "The Government," declared this document, "with shameful violation of their pledges, have refused to give us the law for which the majority voted, and have utterly ignored the expressed will of the people, clearly showing, as most of us believed at the time the scheme was first proposed, that the whole thing was a subterfuge and a farce, and once again we find ourselves mere trickster's tools and fools." On April 23 the House of Commons debated the question, and Mr. T. B. Flint moved a resolution in favor of a prohibitory law to take

effect "in at least those provinces and territories which have voted in favor of such prohibition." Mr. C. H. Parmalee (Liberal) moved an amendment to the effect that, in view of the state of public opinion revealed by the plebiscite, it would be unwise to enact a prohibitory law at present, and this was carried by 98 to 41 votes.

The Post Office.—This department made marked strides in efficiency during the year under the administration of the Hon. William Mulock. Imperial penny postage proved a great success. In South Africa the Canadian postal corps came in for warm praise at the hands of the army officials, and Capt. Ecclestone's services in its supervision were so much appreciated that he was transferred to the imperial postal department in that country. The Canadian statistics for 1899 show 9,420 post offices, 838 savings-bank offices, 2,640 postal-note offices, 142,141 new savings-bank accounts opened, 471,407 postal notes sold, 1,779 money-order offices; \$14,467,997 as the value of the money orders issued, 31,989,778 as the number of miles the mails were carried, 228,024,900 articles carried, a net revenue of \$3,182,930, and expenditure of \$3,581,848.

Railways.—In 1899 Canada had 165 railways, 17,358 miles of track, \$904,699,784 capital invested in railways, and a train mileage of 52,215,207. Its railways carried 19,133,365 passengers and 31,211,753 tons of freight; earned \$62,243,784, and had working expenses of \$40,706,217. There were 2,217 locomotives in use and 286 sleeping and parlor cars. The Canadian Pacific is the great railway of Canada. At the close of 1899 it had 6,681 miles in operation, a capital of \$340,714,110, a passenger record of 3,483,843, a freight of 5,971,205 tons, a train mileage of 16,873,771, receipts amounting to \$26,745,971, and expenses totaling \$95,454,173. All these items showed a marked increase over the preceding year.

The Grand Trunk Railway, during the same period, had 3,147 miles in Canadian operation, \$343,722,162 of a paid-up capital, a passenger record of 6,178,315, a freight of 8,880,000 tons, a train mileage of 17,007,740, receipts amounting to \$18,471,159, and expenses to \$11,603,335. The Government railways, comprising principally the Intercolonial, showed 1,511 miles in operation, \$61,943,900 of paid-up capital, 1,732,762 passengers carried, a train mileage of 5,139,970, receipts amounting to \$3,903,343, and expenses to \$3,893,739.

An important controversy occurred between the Minister of Railways and the Canadian Pacific, arising out of the latter's demand for a special subsidy to carry on its winter port business at St. John, N. B., under threat of going to a Maine port if its desire was not acceded to. Mr. Blair refused to grant the subsidy, and matters were complicated by a further discussion as to the Canadian Pacific Railroad receiving and handling a portion of the Intercolonial's business below Montreal. Upon this issue generally Mr. Blair and the Hon. G. E. Foster fought the battle at St. John during the general elections, and upon it Mr. Blair won.

Canals.—Upon the canals of Canada, up to June 30, 1899, \$92,036,524 had been expended. The expenditure in 1899 for construction, repairs, and staff maintenance was \$4,533,193—an increase of \$700,000 over the preceding year. The revenue derived by the Government from these canals was \$369,044, against \$407,663 in 1898. The number of Canadian vessels passing through the canals in 1898 was 23,320, with a tonnage of 4,201,916, and the number of American vessels was 6,128, with a tonnage of 3,624,463.

Miscellaneous.—The governments of the Dominion, Ontario, and Quebec were advised of three

awards issued by the arbitrators—Sir John Boyd, Chancellor of Ontario; Sir L. E. N. Casault, Chief Justice of Quebec; and Mr. Justice Burbridge, of the Dominion Exchequer Court—appointed to settle the long-standing disputed accounts between the federal authority and the old provinces of Upper and Lower Canada. Under the awards Ontario lost about \$2,000,000. One award dealt with the claim of the Dominion in behalf of the Ojibway Indians of Lakes Huron and Superior. The claim had been stubbornly contested, not only before the arbitrators, but in the Supreme Court and the Privy Council in England. The arbitrators found that the Dominion was entitled to receive, in behalf of these Indians, from the provinces of Ontario and Quebec jointly, the sum of \$313,000. The second award dealt with what is known as the province of Canada account, and decreed that two provinces owed to the Dominion, Dec. 31, 1892, on this account, the sum of \$212,904, of which \$112,350 is chargeable to Ontario and \$100,553 to Quebec. The third award had reference to the province of Canada account as between the Dominion and the province of Ontario only. The submission to arbitration required that the accounts be brought down to Dec. 31, 1892, on which date the commissioners found the province of Ontario was indebted to the Dominion in the sum of \$1,815,848.

On April 25 the Dominion Government advised that of British Columbia that it had disallowed four statutes passed by the province in 1899. The reason in each case was that restrictive legislation against the Japanese had been included, despite warnings previously given that the royal assent would be refused.

In September the first of a line of 7 vessels which are to ply between British Columbia and South Africa arrived at Victoria, B. C. The attempt of dynamiters to blow up the Welland Canal in April occasioned some excitement. The Fenians who made the crazy attempt were captured and tried, and on May 25 three men were found guilty and sentenced to imprisonment for life. The Ottawa fire was a disaster that will be long remembered. Thousands of people were rendered homeless in Hull and Ottawa on the night of April 27, 15,000,000 feet of lumber were burned, and property in buildings, etc., to the value of many millions was destroyed. The relief fund at Ottawa soon grew to more than \$300,000. The Dominion Government gave \$25,000, as did the cities of Ottawa and Toronto. Cape Town, in the midst of war, raised \$10,000, and the New Zealand Government cabled \$25,000, while the Lord Mayor's fund in London soon amounted to \$60,000.

CHEMISTRY. Chemical Theory.—Discussing in the British Association The Influence of Pressure on the Formation of Ocean Salt Deposits Dr. H. M. Dawson said that in the uppermost layers of the large salt deposits at Strassfurt a double salt containing magnesium and calcium chlorides was found, to which the name of tachhydrite had been given. Experiments showed that this double salt could separate only from solutions the temperature of which was higher than 22.4° C. If the temperature was lower than this limit a mechanical mixture of the simple chlorides separated from the solution. Experiments on the influence of high pressure on the value of this limiting temperature showed that by the application of 100 atmospheres the temperature was raised by only 1.5° C. In comparison with the influence of temperature, that of pressure was small. Thermodynamical considerations indicated that the temperature displacement by the application of high pressures in

the case of other salts must be of the same order of magnitude as that which had been found in the case of tachhydrite. From the insolubility of other sea salts in the mother liquor from which tachhydrite separated, and the direction in which pressure exerted an influence, it might be definitely concluded that the temperature of the mother liquor when tachhydrite was deposited was higher than 22.4°C .

The chairman's address of James Lewis Howe before the chemical section of the American Association, on The Eighth Group of the Periodic System and Some of its Problems, concluded with a brief consideration of the group from the theoretical point of view. Following Dr. Venable, the author said that we may assume that each of the first seven groups consists of a group element, as, in group one, lithium; a type element, as sodium; and two series, one of more positive elements, as potassium, rubidium, and caesium, and the other more negative, as copper, silver, and gold. Further, the more positive the type metal, the more closely will the metals of the positive series resemble it. Thus, in the first group, the positive series, potassium, rubidium, and caesium, resemble the type element, sodium. In the seventh group, the negative series, bromine and iodine, resemble the type element, chlorine. Now, the eighth group differs materially from the other seven groups in that it contains three series, with no group or type element. These three series are transitional from the least positive among the seven positive series, manganese, to the least negative among the negative series, copper, arsenic, and gold. The properties of the metals of group eight show the transition as from a chemical point of view. Iron, cobalt, and nickel form a direct gradation between manganese and copper. Now comes a further question as to the possible transition elements between the most negative series, fluorine, chlorine, bromine, iodine, and the most positive series, sodium, potassium, rubidium, and caesium. From a theoretical point of view such transitional elements should be neither positive nor negative, and should have a valence of zero. A few years ago the realization of such a conclusion would have seemed impossible, yet since the discovery of argon and its congeners it seems almost probable that these places have been filled in accordance with the theory. Taking the most commonly accepted atomic weights, we find helium preceding lithium, neon following fluorine and preceding sodium, and argon really between chlorine and potassium, but with an atomic weight apparently slightly greater than that of potassium, which follows it, resembling in this respect cobalt and nickel of this same group, and also tellurium and iodine. There would, in addition, be expected from the analogies of group eight one, two, and three transitional elements between bromine and rubidium of atomic weight 80 to 86, and Ramsay has suggested that krypton may belong to this place; so also an element or elements of similar character might be expected between iodine and caesium with atomic weight of about 130. The recently published work of Ladenburg and Kruegel on krypton gives it an atomic weight of about 59. This would, as Prof. Ladenburg suggests, make it immediately precede copper; but unless we change very materially our ideas of the periodic law, it is difficult to conceive of an element with the properties of krypton lying between nickel and copper. If these inert gases belong to the eighth group it may seem strange that iron and the other familiar metals which belong here should be so unlike such a type element as argon or neon; it must, however, be

borne in mind that this is only an expected exaggeration of the departure found in the first and seventh groups, where copper departs from its type element, sodium, and manganese from its type element, chlorine. As to whether three elements are expected of atomic weight 150 between the light and the heavy platinum metals, we have little data upon which to theorize. As a matter of fact, there is very little definite knowledge of the metals between caesium and tantalum. The inter-Jovian planet proved to be an indefinitely large number of asteroids; Sir William Crooke's study of the rare earths leads him to the conception of a group of asteroidal meta-elements in the vacant space of the periodic table. We must await further knowledge before these problems can be satisfactorily solved.

The existence of a relation between the different factors of equilibrium (temperature, electromotive force, pressure, physical, and chemical nature, condensation, and concentration) is affirmed by M. O. Boudouard. This relation is such that each of the factors is a function, and a continuous function, of the others. This is known exactly in the law which concerns the correlation changes of pressure and temperature (Clapeyron's formula). There exists further at constant pressure and temperature a relation between the proportions of different bodies present in a gaseous mixture in equilibrium (Isenbart's experiments in ammonium sulphate).

Mr. W. J. Pope, in a paper on recent developments in stereo-chemistry, read at the last meeting of the British Association, reviewed the results of investigation in that branch since the hypothesis of the asymmetric carbon atom was first put forward by Van t' Hoff and Le Bel in 1874. Pope and Peachey prepared in 1899 a series of compounds which owed their optical activity to their containing asymmetric nitrogen atoms; and during the present year they had prepared optically active compounds containing asymmetric tin and sulphur atoms. In the discussion of the paper, Dr. Divers commented upon the light thrown upon the atomic theory by this work. Dr. H. E. Armstrong observed that considerable elucidation of the difficult question of valency might be expected from it.

The report of a committee on alloys of the British Association mentions the fact of the belief of most students that certain definite chemical compounds exist in alloys. To prove this, however, special means had to be devised to detect these compounds. Ordinary chemical methods of isolation were of little use under the circumstances. Fractional solution has been effective in some cases, and by means of it several distinct metal compounds have been separated from alloys, such as platinum-tin, copper-tin, zinc-copper, and other compounds. Another method is by observation of the "freezing point." The molten mixture is cooled down slowly, and the temperature is noted at which solid matter begins to appear from the liquid. This varies with the proportions of the constituents, and by making many observations with varying proportions a curve may be obtained of their solidifying temperature, any irregularity pointing to the formation of something more than a mere mixture. By this means many interesting facts have been indicated which have subsequently been rendered evident by examination under the microscope. Valuable and interesting results have thus been obtained. Profs. Roozeboom and Chatelier having particularly distinguished themselves in this direction. A remarkable instance of peculiarity is exhibited by mixtures of aluminum and antimony, when all the mixtures freeze out at a

higher point than either of the components, and show two irregularities indicative of two distinct compounds. In these mixtures it appears that the component that predominates to a considerable extent is always a solvent to the compound formed with the other component; but as the proportion of the other component is increased, the condition becomes reversed. Interesting results have been obtained by observing, not only the freezing point, but the point where the whole mass solidifies, so that for every mixture the exact composition of the mass from which the compound has separated and of the separate compound is indicated. Röntgen-ray photography has also been utilized to demonstrate the formation of these intermetallic compounds. A long list of known and supposed alloy compounds is given in the report; and it appears that the atomic relations generally assumed by chemists do not hold in the case of the alloys.

In presenting the foregoing report Mr. F. H. Neville held that intermetallic compounds may be compared with the unstable compounds of the halogens to each other and with sulphur. They often bear a great superficial resemblance to their constituent elements, and appear to show marked dissociations or to form systems in true equilibrium with the liquid mixture of their components.

An experiment described by Schönbein nearly forty years ago in which on shaking lead amalgam with air and water equivalent quantities of lead oxide and peroxide of hydrogen were formed has been followed in recent years by many isolated cases indicating a phenomenon of autoxidation or simultaneous oxidation by air of two substances, one of which is incapable of being oxidized by air alone. The formation of peroxide of hydrogen in such cases is proved by the researches of Bamberger, and of Manchot in particular. The probability has been suggested by Engler that in all these instances the reaction is simultaneous, half of the oxygen molecule going to oxidize the substance present, and the other half to form hydrogen peroxide. In many cases the formation of the latter substance is difficult to prove, on account of the secondary oxidizing action in the substance used. Dr. H. Biltz has described experiments on the oxidation of hydrazine of debromoxylbenzaldehyde in alkaline solution by air at the ordinary temperature, and in this case he has been able to prove that the amount of oxygen in the hydrogen peroxide formed is exactly equal to the oxygen used up by the hydrazine.

Prof. Brauner said at the German scientific meeting in September, 1899, concerning the position in the periodic system of the elements of the rarer earths, that he considered that the position indicated by the fourth group and the eighth series must be assigned to a group of three elements—cerium, 140; praseodymium, 140.8; neodymium, 143.6. This conclusion was based in a great measure on the study of the higher oxides. The author considered that the oxides Pr_2O_3 and Nd_2O_3 belong to the oxides of the PbO_2 or ozonic type—that is to say, that the metals in these oxides are tetravalent, and the oxides correspond to Ce_2O_4 . At first sight the oxides obtained by precipitation with hydrogen peroxide should belong to the second, H_2O_2 , or autozonic type of oxide. Prof. Brauner found that on repeating this experiment at low temperatures the hydrates of true superoxides were formed, possessing the formula Pr_2O_4 and Nd_2O_4 , and losing oxygen with great ease.

Chemical Physics.—The record of the study of radio-active substances, as it is summarized in

a paper read by H. Carrington Bolton before the Chemical Society of Washington, and published in the *Journal of the American Chemical Society*, begins with the announcement by Becquerel that the salts of uranium emit invisible radiations capable of discharging electrified bodies and of inducing skiagraphic images on sensitive plates. Other experimenters found that a number of other substances had the power of emitting "Becquerel rays": Mr. Henry, phosphorescent zinc sulphide; Niewengloski, insolated calcium sulphide; Troost, artificial hexagonal blende; Schmidt, thorium compounds. Mme. Curie, studying the subject with her husband and using a special apparatus, found the property in a number of minerals, and observed especially that pitchblende contained a substance analogous to bismuth, which emitted rays 4,000 times stronger than those of uranium. She called this substance polonium. Afterward Mme. and M. Curie discovered a second radio-active body in pitchblende which they called radium. This hitherto unknown element was found to accompany barium in analytical separations. Its chloride is wholly soluble in water, and it responds to the usual tests for barium. Its spectrum shows the lines peculiar to barium, and other lines peculiar to itself. Attempts to separate barium from radium have been unsuccessful, but a salt has been obtained having 900 times the activity of uranium. The rays emitted by the two new substances possess luminosity and actinic and skiagraphic power, and render the air through which they pass a conductor of electricity. In some other respects polonium and radium manifest noticeable differences in behavior. The rays emitted by these substances have the power, when in contact with inert bodies, of communicating their activity to them, and of exciting phosphorescence in gems and minerals (barium sulphide, calcium sulphide, etc.). Mme. and M. Curie have observed that this induced property continues for a considerable time. In fluorite the phosphorescence remained twenty-four hours after the influence of radium had been removed. The authors, having obtained samples that were from 5,000 to 50,000 times more powerful than uranium in communicating radio-active energy to inactive bodies, observed while experimenting with them that the induced activity immediately after exposure varied between one and fifty times that of uranium, but was reduced two or three hours later to one tenth its original value. A research was made to determine whether induced radio-activity is due to traces of radio-active matter carried in the form of vapor or powder to the exposed surface. The fact that no differences were found in the radio-activity of the various substances experimented upon seemed to favor this supposition; but the authors believe they have proved the theory to be incorrect, and that real induced radio-activity exists. They regard the phenomenon as a kind of secondary radiation due to Becquerel's rays, but differing from the phenomenon which is known to exist for Röntgen rays. "Indeed, the secondary phenomenon of Röntgen rays, as known at present, becomes apparent at the moment when the body is struck by the Röntgen rays, and ceases abruptly with the cessation of the latter." The energy imparted to metallic plates was not removed by washing in water, although radium chloride is soluble in water. Mme. and M. Curie have further found that the rays emitted by radiferous salts of barium are very active, and are capable of transforming oxygen into ozone. The radiferous products necessary for the production of ozone are all very active and very luminous, the phenomenon ap-

pearing to be more directly connected with radio-activity than with luminosity. Very luminous radium produces less ozone than radium chloride, which is much less luminous, but more strongly radio-active. Again, if a radium salt is contained in a glass vessel, a violet coloration is seen in the glass, which proceeds from the interior to the exterior surface. At the end of about ten days the bottom of the flask is almost black. With a less active product the tint is less deep, and requires a longer time to develop. The phenomenon is not due to the reduction of lead, as it occurs in glass containing no lead. All these phenomena indicate that the rays emitted by radium represent a continual development of energy. In another paper on the subject Mme. Curie cited both her experiments and the spectrum examinations as seeming to prove that radium exists as a substance, and possesses an atomic weight slightly higher than that of barium. In the course of further experiments with radium, Mme. and M. Curie found that the radiant emission charged bodies which received it negatively, while the radium itself was charged positively. In the light of these and other experiments, M. Becquerel declared, in March, 1900, that only one interpretation seemed possible, at least for that part of the emission comprising the deviating rays, and that was that the emission was composed of material particles carrying negative charges. He did not consider the objection to this view based upon the loss of mass of the radium valid, because, as the Curies had shown, the charges carried off were so feeble "that if we admit the same proportions as with cathodic rays, some millions of years would be required to remove one milligramme in the case of the most intense radiation that has yet been observed." This author added, as a thing that could be said with certainty, that "the new discoveries singularly limit the field for hypotheses, and by fixing the direction for research, permit us to foresee a generalization of great magnitude, which will be of great attraction in the study of certain properties of matter to which in the last few years a large body of scientific men have turned."

Throughout the researches of Mme. and M. Curie on the isolation of radium, the progress of the condensation of the element was controlled by examination of the spectrum and by determinations of atomic weights. In all the separations a part of the product was kept for spectroscopic studies, and a part for atomic weight. The spectroscopic studies have been made by M. Demarcay. The last of his products apparently contained only a trace of barium, and might be considered almost a pure radium chloride. It was not in large enough quantity for atomic weight investigation, and Mme. Curie was obliged to deal with the less concentrated product. Her determinations gave 133 as the atomic weight of pure barium in barium chloride, while two determinations carried out on the radio-active chloride gave 174.1 and 173.6 as the numbers for the atomic weight of the metals in this chloride. The author had no means of distinguishing the relative quantities of radium and barium in this product, but M. Demarcay thinks, from the aspect of the spectrum, that there is rather more radium than barium. In any case, it appears to be certain that the atomic weight of radium is much higher than 174. The quantity of radium chloride isolated has been insufficient for an examination of the properties of pure radium. Mme. and M. Curie, however, express themselves much pleased at having obtained a proof of the existence of this element, and

at having confirmed the idea which guided them in their researches on radio-active materials.

A fundamental difference has been found by M. Henri Becquerel to exist between the rays emitted by radium and those of polonium, in that a part of the radium rays are deflected by an electro-magnet. The deviation appears to be the same in the air and in a vacuum. The rays given off appear to be the same in nature, but to differ only in intensity. Herr F. Geisel has observed a considerable difference in the penetrating power of the rays of the two bodies: while the rays from radium penetrate fairly well a silver thaler, those from polonium, although more intense, are absorbed by thinner metallic plates. The shadows of the band and of metallic objects thrown by the polonium rays on a fluorescent screen are stronger in contrast than those produced by the radium rays. Experiments by M. Henri Becquerel on the velocity of propagation of the rays emitted by radium indicate that this factor is of the same order as that of the cathode rays. The spontaneous luminosity of radium compounds was announced by Mme. Curie in March, 1899. M. A. Debierne, experimenting with pitchblende, found associated with titanium a substance showing 100,000 times more radiant power than uranium, and having chemical properties distinct from radium and polonium. The rays emitted by this body, which was named actinium, had the same manifold action as those from the other substances, except that it was not self-luminous. M. Debierne found the new substance analogous to thorium, and suggests that the radio-activity of the latter is due to its presence. Other experiments have been made with these radio-active substances by some German chemists and by Mr. Bolton. The primary source of the energy manifested by them is still unknown. B. von Langel, of Buda-Pesth, has pointed out that the chemical evidence is insufficient to establish their elementary character, and claims, in a preliminary paper, to have prepared radio-active barium synthetically. By treating uranium nitrate and barium nitrate fused in the electric arc with nitric acid, water, and sulphuric acid successively, he obtained radio-active barium sulphate possessing all the characteristic physical properties observed in that substance.

The property of becoming luminous under the influence of the Becquerel rays has been observed by M. Paul Bary to be acquired by certain metals of the alkalis and the alkaline earths—by sodium, potassium, lithium, rubidium, cesium, magnesium, calcium, strontium, and barium. Of other metals, only phosphorescent salts of uranium exhibited this property. These results lead the author to the conclusion that the same class of bodies which yield salts phosphorescent to light yield also compounds which become luminous under the influence of the X and the Becquerel rays. From this point of view, at least, these latter rays behave like luminous rays of shorter wave length.

At the conclusion of an article in *Nature*, on the nature and properties of the Becquerel rays, Mr. G. H. Bryan observed that before 1896 physicists were just beginning to grasp Maxwell's theme and to realize more clearly the simplification into the notions of electric and optical phenomena by the conception of the ether. The discovery of rays capable of discharging electrified bodies in the air had not only shown the fallacy of our preconceived dogmatic notions as to the division of substances into conductors and dielectrics, but had taught us that the properties of the ether are not so simple as we had anticipated.

New Substances.—A new sugar has been described by Mr. Gabriel Bertrand as produced by the action of the sorbose bacterium upon erythrite. By its reaction it appears to be a ketone of the composition $\text{CH}_2(\text{OH})\text{CO}\cdot\text{CO}(\text{OH})\text{CH}_2\text{OH}$, thus being a lower homologue of levulose. Erythrose, as it is called, is not fermentable by yeast, but forms a well-crystallized osazone. It resists oxidation by bromine water, and hence is probably a ketone.

Samarium prepared by the crystallization of a double magnesium nitrite, as already described by M. Eugène Demarçay, can, according to that author, be obtained in a state of comparative purity, showing, after continuous fractionation, the properties of the first and last portions to be absolutely identical, both with regard to the absorption and the spark spectrum. The absorption spectrum obtained by the author corresponds in all respects with that previously published by Lecoq de Boisbaudran. The line 614.4 is, however, absent in this specimen of pure samarium. The author obtained the absolute weight of his samarium by the synthesis of the sulphate from samaria and sulphuric acid, varying between 147.2 and 148. Nitrite of samarium and magnesium, $\text{Sm}(\text{NO}_2)_2 \cdot 3\text{Mg}(\text{NO}_2)_2 \cdot 24\text{H}_2\text{O}$, is a pure yellow salt, crystallizing in large rhombohedrons and melting between 93.5°C . and 94.5°C . The simple nitrate, $\text{Sm}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$, is formed in large orange-yellow crystals, melting at 78° – 79°C ., and is very hygroscopic.

By passing dry cyanogen into a glass tube heated to redness and full of iron nails T. L. Phipson obtained a gas which could be collected over water. As described by the author, this gas is colorless and almost odorless, extinguishes a lighted match without taking fire itself, and is not absorbed by potash. It does not detonate when mixed with oxygen and submitted to the electric spark. Its weight is materially different from that of nitrogen, and more so from that of cyanogen, so as to make it sure that it is neither. From two determinations that were made, its atomic weight was deduced as that of a substance having one half the carbon contained in cyanogen. The author intimates that it is perhaps identical with argon, of which about 1 per cent. has been found in atmospheric air. If this be so, then argon is a carbide of nitrogen containing half the carbon found in cyanogen.

In a paper read in the British Association on some new chemical compounds discovered by the use of the electrical furnace Mr. C. S. Bradley announced the production of silicides of barium, calcium, and strontium by heating the carbonates or oxides with silica in the electric furnace in the presence of carbon. These silicides have a metallic appearance with a crystalline structure, oxidize in the air, evolve hydrogen when decomposed with water, and yield silico-acetylene, Si_2H_2 , with hydrochloric acid. Silico-acetylene, unlike ordinary acetylene gas, is a yellow crystalline compound.

Experiments are described by M. Eugène Demarçay with gadolinium, which, besides small quantities of terbia, contained a certain quantity of Σ -Z, which had not been eliminated. In the course of the fractionations, a decided quantity of the double nitrate of magnesium and gadolinium was isolated. The spectrum of the gadolinium extracted from this salt, examined under the spark of the induction coil, showed only slight traces of the strong lines of Σ -Z and yttrium. The stronger lines of this spectrum were only feeble, and the traces of yttrium were estimated at less than $\frac{1}{1000}$ part of the absorption spectrum. This gadolinium, at first sight, appears to be as white

as magnesia, but with a little attention alight yellow tinges may be seen, which are ascribed to the presence of a trace of terbia. The double magnesium nitrate melts at 75.5° – 78°C . The simple nitrate, crystallizing with CH_2O , melts at about 91.5° – 92°C . At this temperature the nitrate with CH_2O seems to lose water and be transformed into a less hydrated nitrate, which remains in solution, and may lower the freezing point. This gadolinium gives the band spectrum of M. Lecoq de Boisbaudran. The atomic weight of gadolinium has been found by the various chemists who have investigated the properties of this element to be about 165. From several attempts the author has deduced a number approximately the same, but he believes it to be slightly too high, on account of the defects of the method used.

Gadolinium has been found by C. Benedicks to be closely allied to the yttrium metals, and to resemble the cerium metals in a much slighter degree. Therefore a small intermediate group is formed of samarium and gadolinium. For trivalent elements, most characteristic are the platinochloride and gold chloride double salts, the potassium double sulphate, and the basic carbonate of gadolinium. Nothing can yet be definitely stated with regard to the position of gadolinium in the periodic system, but it will certainly, the author affirms, find a place in the eighth horizontal row.

The manufacture of artificial dyestuffs in Germany is referred to in a recent consular report from Frankfort-on-the-Main. The endeavors of manufacturers and industrial chemists are directed, generally speaking, to producing the organic natural products by artificial means, and in a more serviceable form for dyeing; also to producing new colors approaching and even surpassing the natural kinds in effectiveness and brilliancy. Since the discovery that the important dyestuff of madder—alizarine—could be produced in an easy and cheap manner from the carburetted hydrogen of coal tar, the use of dyestuffs obtained by coal-tar distilling has gradually grown to such an extent that in Germany about five times as many artificial colors are made as in all other countries combined. The importance of indigo is evidenced by the fact that the production of vegetable indigo equals in value the entire world's production of artificial dyestuffs. The present artificial indigo represents almost pure indigotin. It is sold in the form of a 97-per-cent. powder, whereas the indigotin contained in vegetable indigo fluctuates between 70 and 80 per cent. It contains no indigo red, no indigo brown, and no indigo blue. The lack of indigo red and indigo blue, which both seem to be of some importance in the relation of the dyestuff to the fiber, are its special disadvantages. The indigo red seems to be of importance in the production of darker shades of color. There is no doubt that at some time not too far off it will be possible to produce this ingredient also. Artificial indigo is used by dyers in the same way as vegetable indigo.

A peculiar, light-brown, highly voluminous substance is described by Erdmann and Köthner as being formed by the action of acetylene below 250°C . upon cuprous oxide, or even, though more slowly, upon copper. At higher temperatures a black carbonaceous mass is the result, and at a red heat (from 400° to 500°C .) carbon is deposited in a graphitic condition. The light-brown fluffy material yielded cuprous chloride to hydrochloric acid, a distillate from its mixture with zinc dust possessing the characteristic of naphthalene, or, at high temperature and under rapid heating, aromatic compounds, among which naphthalene and a cresole were indicated. Erdmann and Köthner

classify this body as a very complex but nonexplosive copper acetylene, and give it a formula which implies a loss of carbon. This formula is criticised by F. A. Gooch and DeForest Baldwin, who, upon revising it, deduce the conclusion that the new product is deficient in hydrogen, not in carbon, as compared with acetylene. The results of the experiments of these authors go to show that, while metallic copper may at comparatively high temperatures induce the polymerization of acetylene, the action is an oxidizing one which starts at moderately low temperatures; and they find no evidence that the product of the action of acetylene on the oxides of copper under the conditions of their experimentation is other than a mixture of a hydrocarbon or hydrocarbons with metallic copper, and, probably, in the darker preparation, some free carbon.

The hydrate of sulphuric acid, $\text{H}_2\text{SO}_4 \cdot 2\text{H}_2\text{O}$, whose existence was predicted by Mendeléeff, has been obtained in crystalline form by Von Biron by cooling with liquid air a mixture of strong sulphuric acid and water in the required proportions. The whole solidifies into an amorphous mass, which, when rubbed with a glass rod, becomes crystalline, the temperature at the same time rising to 75°C . If a solution of sulphuric acid of the right strength is now cooled with solid carbonic acid and ether, and a fragment of the crystalline hydrate is added, the liquid crystallizes well. The crystals melt at -38.9°C .

Numerous attempts have been made to obtain the condensation product N_2 from the curious compound of nitrogen and hydrogen known as hydrazoic acid. Among the experiments were those made in the laboratory of Prof. William Ramsay, using the method of the interaction of silver azoimide and iodine. Although the substance sought could not be isolated, Prof. Hautzsch has succeeded in isolating a definite iodide of nitrogen from the products of the reaction. By working at a low temperature and as rapidly as possible in the presence of ether, the new iodide is taken into solution by the ether, and can be obtained as a yellowish solid in minute quantities, not exceeding 0.2 gramme, by the rapid evaporation of the ether. The solid is too unstable to submit to analysis, but an examination of the solution showed that its composition was N_2I . This iodide is violently explosive. Attempts to prepare N_2 by the action of the iodide on silver azoimide, or by the spontaneous decomposition of the iodide, were unsuccessful.

M. Moissan has been able, by the aid of a method in which a U-tube of copper takes the place of his original platinum-iridium apparatus, to study without difficulty reactions demanding considerable quantities of fluorine. A new fluoride of manganese obtained by him casts some light on the valency of the metal. Fluorine gas reacts readily with powdered manganese, and in Prof. Moissan's experiments a higher fluoride than MnF_2 was formed, which, however, on account of the violence of the reaction, was not of constant composition. The interaction of fluorine and manganese iodide gave a definite fluoride, Mn_2F_7 , which in many of its reactions behaved like free fluorine, giving with pentachloride of phosphorus PF_5 , and with amorphous carbon a fluoride of carbon. On heating this manganese fluoride splits up into MnF_2 and fluorine gas.

Metallic caesium may be prepared, according to Herren Graeffe and Eckhardt, by the reduction of caesium carbonate by means of magnesium powder. The mixture is heated in an iron tube, through which a slow current of hydrogen passes. The metal distills over, and is collected under melted

paraffin. It has a silvery luster with a slight yellow tint, and remains bright under paraffin. On exposure to air it oxidizes quickly, melts, and finally inflames. In its action on water it resembles potassium.

Experiments have been described by Hall in the American Chemical Society which he has made to ascertain the cause of the loss in weight which platinum vessels are known to suffer when heated in the flame of a Bunsen burner or over a blow-pipe. Platinum wires inclosed in glass tubes were heated strongly by an electric lamp in the vapor of various gases. There appeared practically no loss in hydrogen, carbonic oxide, and carbonic acid, but there was a rapid loss when the gas was oxygen or air. Similarly it was found that platinum wires suffered a greater loss of weight when heated in an oxidizing flame than when heated in a reducing flame. The author suggests that these phenomena are best explained by the hypothesis that platinum forms a volatile oxide, stable at high and low temperatures, but unstable at intermediate temperatures—a similar behavior having been observed by Troost and Hautefeuille in the case of platinous chloride.

A new cellulose product—acetate of cellulose—is described by Dr. C. O. Weber as a substance which constitutes a point of departure for a whole series of homologous bodies, some of which are destined to play an important part from the industrial point of view. The new substance is prepared by a method discovered by Cross and Bevan, the application of which is already carried on on a large scale, as is also the manufacture of tetrabutrylate of cellulose, which is prepared in an analogous manner. Besides these ethers of cellulose, nothing is at present known beyond the nitrates of cellulose, which are distinguished from the ethers by their explosive properties. The ethers are not inflammable, and burn only imperfectly. With solvents they behave in the same manner as the nitrates, in so far that all their solutions are of a colloidal nature, but they differ from the nitrates in regard to the extent of their solubility. The solution of the acetate in nitrobenzene becomes on cooling a solid but completely transparent jelly. The acetate resists the action of reagents in a remarkable manner; dilute acids, with the exception of nitric acid, do not attack it at all; neither do the alkaline lyes, even at a high temperature; while these reagents completely destroy the nitrates, even in the cold. When boiled for several hours with an alcoholic solution of soda very fine particles are completely saponified; but the saponification does not disintegrate the materials, so that the particles retain their form and transparency. The insulating properties of the acetate surpass those of India rubber and gutta-percha. The substance is very durable and does not begin to soften below a temperature of 150°C . The change is not accompanied by any destruction of material. Hydrate of cellulose resembles the acetate in chemical properties and resistance to the action of reagents and to high temperatures, but is more soluble in many substances. The filaments prepared from the butyrate closely resemble those formed from the acetate, but are a little more flexible and softer. These properties promise to give commercial importance to the acetate and butyrate of cellulose, which will probably be found preferable to celluloid in cases where a noninflammable material is desired rather than a very inflammable one. By reason of their noninflammability, their resistance to the action of moisture and to high temperature, and their high insulating properties, they can easily replace

mica and be employed for insulators. It is also certain that they can be advantageously used as metallic lacquers.

Essence of chrysanthemum is described by O. Perrier as a greenish liquid of an oily consistence, with a special odor recalling those of peppermint and camomile. It begins to boil at 160°C .; its density is 0.932 at 15°C ., and its index of refraction at 18°C is 1.4931. It is soluble in 10 parts of alcohol at 95°C ., but is almost insoluble in alcohol at 70°C . When cooled down to -15°C it deposits a small quantity of an amorphous solid substance, which is probably paraffin. At 240°C it becomes black; and it solidifies in a mixture of ether and solid carbonic acid.

A new gutta-percha lately discovered is the product of a tree which grows principally at Dunge, near Zanzibar. When the tree is tapped a white fluid exudes, which, placed in boiling water, coagulates into a substance strikingly resembling gutta-percha. As the material cools it becomes very hard, but while soft it can be molded into any required shape. The experiments made upon it indicate that while it may not prove equal to gutta-percha, it will be suitable for some of the purposes for which that material is used.

Among the products of the action of fluorine upon sulphur recently investigated by M. Moissan, thionyl fluoride, SOF_2 , was noticed. MM. Moissan and Lebau have made this fluoride the subject of a more careful study, and have succeeded in obtaining it pure by the action of iron upon thionyl chloride and by the interaction of fluoride of arsenic with thionyl chloride. It is a colorless gas, foaming slightly in moist air, and possessing an unpleasant odor resembling that of carbonyl chloride. It is easily condensed by the action of carbonyl dioxide and acetone, giving a liquid that boils at -32°C . In the absence of moisture glass is not attacked by the gas at temperatures lower than 400°C . Above this temperature silicon tetra-fluoride and sulphur dioxide are produced. Water decomposes thionyl fluoride at ordinary temperatures, giving hydrofluoric and sulphurous acids. Indications were observed of another oxyfluoride of sulphur, not absorbed by water and possessing a lower boiling point.

New Processes.—Of recent developments in the textile industries, Dr. A. Liebmman mentioned in the British Association the process for producing the peculiar "scroop" in silk and an increase in luster on woolen fabrics by means of chlorination and bromination. He described different modes of producing artificial silks from gun cotton, cellulose, and gelatin, and referred to the mechanical improvements made for increasing the brilliancy of cotton fabrics and to the operation for obtaining highly lustrous effects by mercurization.

In a paper by Mr. A. E. Sunderland on applications of electro-chemistry in dye and print works, the requirements to be fulfilled by a machine for electrical dyeing are defined as being: 1, the poles must not be of metal, but of carbon or biscuit porcelain, which conduct by being saturated with the electrolyte; 2, they must be as near to one another as possible; 3, the cloth must pass between the poles in the open width; 4, the poles may be perfectly smooth and perfectly cylindrical, revolving freely. These particulars are necessary, because in the ordinary passage of the electric current across any dye solution the tendency of the dye is to concentrate itself around the negative pole, and not to circulate freely in the whole dye vessel. There is always thus a great danger of unevenness. In the finishing of goods

the peculiar effect called watermarking or *moiré* can be produced by a process which resolves itself practically into the local application of electrolysis. A platinum plate of suitable size is connected with the positive pole of the source of current. On this conducting surface is placed some absorbent material saturated with a solution of common salt. On this pad is placed the fabric to be watermarked, and the plate engraved with the watermark, connected with the negative terminal, is pressed down upon it. The salt solution is decomposed, and a facsimile of the watermark is printed on the cloth. To produce opaque designs the absorbent material is saturated with a solution of barium chloride which is decomposed on passing the current.

Chlorine has been used by Traube and Bassenge for the purification of water, Bassenge recommending a dose of 0.0978 gramme of chlorine per litre of water for ten minutes. Bromine, recommended by Schimburg, gave the same result with 0.04 gramme per litre after five minutes' contact. According to Allain, a dose of $\frac{1}{100000}$ part of iodine kills all the nonsporadic pathogenic germs in half an hour, as well as most of the saprophytes. F. Mainejeac has carried out a systematic series of experiments with a badly contaminated water, using varying equal quantities of chlorine, bromine, and iodine per litre. Taking the lowest quantity given by the above-mentioned authors as the basis—that is to say, 0.01 centigramme per litre of water for half an hour—he found that the number of microbes per cubic centimetre was reduced from 17,500 in the original water to 300 by the action of chlorine, to 190 by that of bromine, and to 90 by that of iodine.

From a number of papers, published in abstract in the *Moniteur Scientifique*, on the purification of acetylene it appears that solutions of metallic salts do not wholly remove the impurities, while chromic acid and chloride of lime seem to be the only substances that effect a complete purification. Of these chromic acid is preferable, since explosions have occurred with chloride of lime. The acetylene works which supply the Hungarian state railways with gas use, according to M. Pfeiffe, a solution of chloride of lime and plumbate of soda, chloride of lime having been found likely to cause an explosion. Experiments with the new mixture indicate that it is not dangerous.

Up to the present time lithium has been obtained by electrolyzing lithium chloride in the molten state. The reason why this metal can not be obtained from aqueous solutions by electrolysis is that it reacts with water, forming hydrogen and lithium hydroxide. If a solvent for a lithium salt could be found upon which lithium does not act, the metal could be deposited from the solution by electrolysis, provided the solution proved to be an electrolyte. Pyridine has been found by Louis Kahlenberg to be a solution of this kind. It will dissolve lithium chloride and thus form a solution that conducts electricity. The author has obtained lithium in white metallic form from solutions of lithium chloride in pyridine by electrolysis at room temperatures. It can be obtained thus from a comparatively cheap ore in quantities sufficient for most scientific purposes. Lithium, being an alkali metal that is not very plentiful in Nature, has thus far not found use in practical life in the metallic form; and the indications at present are not that it will be used in practice.

In all the usual methods the ignition of a jet of recently generated hydrogen gas is attended by danger of explosion. The following method is recommended by C. G. Hopkins, who has used it

with his classes for several years, as absolutely safe and involving no loss of time. As soon as the action begins collect the escaping gas in a test tube, and when the tube is thought to be full of pure gas remove 2 or 3 feet from the generator and ignite the hydrogen in the test tube; then immediately attempt to light the jet of hydrogen with the hydrogen flame contained in the test tube. If the gas is explosive it will explode in the test tube and leave no flame. If, on the other hand, a flame remains in the test tube with which the jet can be ignited it is certain that the gas in the generator is no longer explosive. Hence the caution: Never light the hydrogen jet except with the hydrogen flame obtained as just described.

In the preparation of oxidomorphine, A. Loubiou has obtained a very white and well-crystallized product by the aid of peroxide of hydrogen. The return by this new process is less than by that with ferrocyanide, but the product is obtained pure immediately; further, not more than an hour is required for the performance of the operation.

Two striking reactions of silver salts and solution of ammonium persulphate have been observed and put under investigation by Dr. Hugh Marshall. When a small quantity of silver salt is added to a strong ammoniacal solution of ammonium persulphate, nitrogen is evolved almost immediately. The temperature rises rapidly, and the action may soon become violent. Apparently the silver is rapidly peroxidized by the persulphate and reduced by the ammonia. In the second reaction an aqueous solution of ammonium persulphate was steadily decomposed at the ordinary temperature in presence of small quantities of silver salts. No evolution of gas takes place, but part of the nitrogen of the ammonium salt is converted into nitric acid. It was found that in the space of two or three days a milligramme-equivalent silver salt per litre of solution decomposed one half of the persulphate originally present, the temperature being 20° C.

The fact that the alkaloids cocaine, atropine, and nicotine are derivatives of pyrrol has suggested experiments in synthesis of pyrrol products. Among the latest of these syntheses is that of pyrrol aldehyde, the analogue of benzaldehyde and furfuraldehyde, which has been accomplished by Bamberger and Djerdjian. The process was by Reimer's reaction with chloroform and potash. The new aldehyde forms a well-crystallized hydrazone, oxime, and also an insoluble sodium sulphite compound, but differs from its analogues in crystallizing readily and in having no smell. Prismatic crystals of this substance several centimetres long have been obtained.

Among the different substances which have been proposed for the biological purification of waters oxidizing agents occupy a preponderating place, especially the permanganates. The attempts at purification by these means have, however, been nullified by reason of the impurities introduced by the reagent. For example, the use of permanganate of potash and lime gives rise to the presence of free alkali in the water, and small quantities of free lime (the alkali present in most cases) make the water absolutely unfit for drinking purposes. This difficulty may be done away with by using permanganate of alumina and permanganate of baryta in variable proportions. The reactions take place easily in the cold, and the quality of the water can be determined five minutes after the addition of the first drop of the reagent. In some cases the reaction is instantaneous.

Having found that recently reduced nickel acts

directly on acetylene, either slowly or with incandescence, Paul Sabatier and J. B. Senderens experimented with other substances. With platinum black, iron, or cobalt the slow reaction was scarcely perceptible, and the phenomenon was limited to the decomposition with incandescence, followed by the more or less complete hydrogenation of a portion of the acetylene. Ethylene, on the other hand, was rapidly decomposed above 300° C. by recently reduced nickel. The metal swelled up considerably, and evolved a variable mixture of methane, ethane, and hydrogen, accompanied by a very slight proportion of higher formene carbide.

On reviewing the science of electro-chemistry and its application to modern manufacturing processes, "one is struck with amazement," says Mr. F. Mollno Perkin in *Nature*, "at the enormous strides which have been made within the last ten or twenty years. On studying works on chemistry little more than ten years old hardly a reference is found to the use of electricity in metallurgy, still less in regard to the manufacture of metallic salts or of the nonmetals, and absolutely none in reference to the preparation of organic chemical bodies, at any rate, on a large scale." Within the last few years electro-chemical analysis has been very much studied, and now many laboratories are fitted with special apparatus for pursuing it. While the process for depositing metals from their solutions has not undergone any radical change, the means at our disposal for carrying out the work have enormously improved. With the cheapening of production since the advent of the dynamo and the storage battery very much has been made possible that would have been regarded as visionary only a few years ago. Among the important applications for various purposes mentioned by the author is the preparation of copper for electrical purposes, of which the absolute purity required is hardly obtainable by furnace methods. Such copper is, however, obtained by the electric process, while the gold and silver present in the metal are also separated and saved. While zinc can not as yet be obtained from its ores by electrolytic methods, zinc galvanizing by electrolysis is used to a considerable extent in place of the old method of hot dipping. The inner surfaces of tubes and the bottoms of ships, torpedo boats, and other large surfaces are now galvanized in this way, with a large saving of convenience. Electrical processes are now used largely, too, in the reduction of aluminum, the manufacture of calcium carbide, gold, silver, and nickel plating, the procuring of nearly all the metals from their oxides, the purification of tin from gold, and the making of accurately reflecting mirrors.

Among the special processes to which electrolytic methods have been successfully applied, the author mentions the preparation of a very pure white lead from a dilute solution of sodium chlorate and carbonate, the electrodes being of lead; of dye products, the nature of which depends upon the solutions employed, the strength of the current, and the material of the electrode, by the electric oxidation of aniline; the production of hypochlorite bleaching solutions by the electrolysis of potassium chloride at low temperatures; and the production of iodoform by the electrolysis of a solution of potassium iodide and sodium carbonate with alcohol.

In the simple method of Dr. R. Uhludruth for preparing free hydroxylamine, when the phosphate of the base is heated gently under reduced pressure the base distills over in a state of such purity that the distillate solidifies on placing the receiver in melting ice.

Atomic Weights.—Discrepancies still appear in the value of the atomic weight of nitrogen as deduced by chemical and by physical methods. The mean value as found by the best chemical determinations is 14.034, while the value calculated from the practically identical densities found by Lord Rayleigh and Leduc is 14.006. A more recent chemical determination, made by Mr. G. Dean from silver cyanide in a state of great purity, gives 14.031—nearly identical with the average chemical value given above. Further work, Nature says, is clearly necessary to explain the considerable discrepancy of nearly 0.2 per cent. between the results obtained by physical and by chemical methods.

Experiments published several years ago indicated that the formula of hyposulphurous (or hydrosulphurous) acid was $\text{H}_2\text{S}_2\text{O}_3$, instead of the accepted form H_2SO_3 . This view was not generally adopted, and the author has made new experiments in conjunction with M. Bazlen, to test them. The results sustain them, and accordingly hyposulphurous acid must be held to correspond in its state of oxidation to the oxide S_2O_3 .

Four series of determinations of the atomic weight of boron by Henri Gautier, using boron sulphide, carbon boride, boron bromide, and boron chloride, gave results the average of which is 11.016. This value is adopted by the author. It is a little larger than the values previously found by Abrahall, and again by Ramsay and Aston.

The International Commission on Atomic Weights has published a paper recognizing the desirability of a universal standard of atomic weights as asked by the German Chemical Society, but expressing the conviction that unanimity can not be reached by starting from $\text{O}=16$. Grave reasons are urged by many voices against the abandonment of the standard $\text{H}=1$. If alteration of the standard is thought necessary, it would be better to start from an element whose atomic weight can be conveniently ascertained—such as silver or iodine—which also serves as a practical starting point in consideration of the sharpness of its reactions in numerous analytical operations. In the opinion of the commission, urgent reasons for an alteration do not yet present themselves. The time has not yet come for an unchangeable table of atomic weights. Teachers want simplicity and clearness, and instructors must suffer no difficulty in presenting intelligible and confidence-inspiring statements. The commission asks from teachers answers to the following questions:

Shall the unity of hydrogen be retained as the standard for reckoning atomic weights?

Shall the atomic weights be given approximately with two decimal places in which the uncertain figures can be recognized by the eye?

Shall the International Atomic Weight Commission have the current table of atomic weights edited on this basis?

By experiments on the density of sulphur vapor at very low pressures, O. Bleier and L. Kohn have obtained results indicating that the true molecular formula of gaseous sulphur, undissociated, is S_8 . This value agrees with the conclusions previously arrived at by the application of the freezing-point and boiling-point methods to sulphur solutions.

From two determinations with ferric oxide prepared from precipitated ferric hydroxide, T. W. Richards and G. Paul Baxter found 55.900 as the mean value of the atomic weight of iron, and five determinations with oxide made from ferric nitrate gave the average 55.883. The latter value is regarded as nearest the truth. Experiments are described which prove that ferric oxide occludes no appreciable quantity of gas, and the same had

been previously shown to be true of iron ignited in hydrogen. Previous determinations are criticised in the author's paper, and the errors which led to the higher value commonly adopted are suggested.

Chemical Analysis.—In a paper on the Chemistry of Perfumes, Dr. W. H. Warren, of St. Louis, says that for the most part substances designated as perfumes are high boiling oils. Formerly the oils, which are complex mixtures of several compounds, were obtained exclusively from flowers, but recently some of the essential principles have been produced by chemical means, whereas the artificial perfumes are mere imitations. With a few exceptions, the essential principles that give the perfumes their value belong to the class of the terpenes. Nearly every substance having the properties of a perfume has in its molecule certain atomic groups, the presence of which exerts a marked influence on the odor. Among the more important of these may be mentioned the aldehyde, ketone, ester, ether, and alcohol groups.

Dr. Carl Otto Weber begins a paper on The Nature of India Rubber, with a reference to the great experimental difficulties encountered in the investigation of colloid bodies whose physical constants are highly indeterminate, and which, instead of melting points, boiling points, and solubility, simply exhibit a gradual merging of the one state into another. These difficulties are met with in a pronounced degree in the chemical investigation of India rubber. If unworked India rubber (Pará) be treated with chloroform or carbon bisulphide partial solution gradually takes place; and it was very early observed that by this treatment the rubber was separated into two parts, the one being soluble, the other insoluble and presenting a peculiar reticulated appearance under the microscope. Very divergent statements are to be found respecting the relative proportions in which these two constituents occur. The author, on treating a specimen of Pará rubber with chloroform, obtained a solution consisting of two layers, the lower of which was a bright clear solution, while the upper part consisted of small clots or shreds of the insoluble part, composing nearly 6.5 per cent. of the dry weight of the rubber used. This swelled to an enormous volume in various solvents, but no appreciable part of it ever passed into solution. The insoluble body was free from stickiness, remarkably tough when dry, and only moderately distensible.

The body representing the soluble part contained nearly 2 per cent. of oxygen, which on further purification tended to approach a vanishing point. Analysis showed that the soluble and insoluble parts were not identical in composition, as had been supposed. A high percentage of hydrogen and a large amount of oxygen are remarkable facts concerning the insoluble part. The experiments left no doubt that to within a very few per cent., India rubber consists of a soluble hydrocarbon of exactly the same empirical composition as the terpenes, $\text{C}_{10}\text{H}_{16}$. While the percentage of oxygen may vary very considerably, the carbon-hydrogen ratio is left practically unaffected, and a number of varieties contain substantially the same $\text{C}_{10}\text{H}_{16}$. We may therefore state that India rubber consists chiefly of a hydrocarbon, $\text{C}_{10}\text{H}_{16}$, readily soluble in benzene, chloroform, and carbon bisulphide; that at least one variety (Pará) contains a small quantity insoluble in the above solvents, and possessing a composition widely different from that of India rubber as above stated; and that, in addition, oxygen products of the hydrocarbon $\text{C}_{10}\text{H}_{16}$ occur in quantities varying considerably in different kinds of India rubber, but

the solubility of which appears to be much the same as that of the India-rubber hydrocarbon itself. The oxygen addition products contained in it do not appear sensibly to affect the chemical behavior of the whole. A high molecular weight is thus indicated. The composition of a chlorine compound obtained by Gladstone and Hibbert is in agreement with their conclusion that the hydrocarbon has for $C_{10}H_{16}$, three pairs of doubly linked atoms. Accordingly, India rubber (polyprene) must be an olefinic, and can not be a cyclic compound like the ordinary terpenes. In other words, the constitution of polyprene would be that of an olefinic polyprene, standing at the end of the terpene series, just as the ordinary polyrenes stand at the end of the cycloterpenes—the hemiterpene C_5H_8 —isoprene—representing the connecting link between the two series.

A method proposed by Carl Otto Weber for separating India rubber from the mineral matter it contains by boiling finely divided rubber in a flask fitted with a vertical condenser with nitrobenzene, has given very satisfactory results in the author's practice. The only drawback to it is represented to be the difficulty sometimes experienced in eliminating the mineral matter from the solution of the products of decomposition of the India rubber. The author's experiments are continued on this and other points in the analysis.

A number of analytical methods applicable to the treatment of manufactured India rubber, published by Dr. R. Henriques, give processes for the estimation of the total sulphur and mineral constituents; of factitious matter in vulcanized India rubber; of nonsaponifiable oils in vulcanized mixtures; of factitious matter and of nonsaponifiable oils in nonvulcanized India rubbers; and of carbonic acid. The author says he has not, on many occasions, been able to obtain satisfactory results when following the method proposed by Weber, either in its original or in its improved form. Nonvulcanized or slightly vulcanized rubber, it is true, dissolves in boiling nitrobenzene, but if we have to deal with hard or highly charged rubbers it is very difficult to dissolve the whole of the gum, and the filtration of the residue presents insurmountable difficulties.

Armand Gauthier concludes from the researches he has made that pure air contains normally about 1/1000 of its volume of free hydrogen, to which must be added, owing to the exhalations and fermentations of the soil, vegetables, animals, and products of human industries, a certain proportion of hydrocarbons, which is relatively great in populous towns, small in country districts, very slight on rocky plateaus and peaks of high mountains, and particularly absent in the higher regions of the atmosphere. There will remain to be determined the nature of the hydrocarbons of the air of towns and woods and the origin of atmospheric dryness.

A method of estimating halogen elements in organic compounds by combustion in a calorific bomb is described by M. A. Valeur, who finds it eminently practicable by reason of the complete and instantaneous combustion of the substance and the rapidity of the operations.

The report of the British Government Laboratory records the examination of a number of tinned meats which had been furnished by the Admiralty for the detection of food preservatives. No antiseptic other than common salt was found. Numerous butters contained boric preservatives, and were artificially colored. The use of boric acid is most prevalent in butters from France, Belgium, and Australia, and is very common also in Holland. The most frequent coloring matter

is annatto, but the use of coal-tar yellows is on the increase, and is especially prevalent in the United States, Holland, and Australia. A filter for passenger ships capable of freeing water from microorganisms had been constructed at the laboratory. An investigation had been undertaken into the mode in which phosphorus in steel is chemically combined, from which it was shown that that substance, like the carbon, is not unfrequently present in more than one form of combination. Another investigation was directed to lead poisoning from the use of lead compounds in pottery manufacture. A considerable number of "fritts" and "glazes" had been examined, and the conditions determining the ease with which lead compounds may be extracted from them by dilute acids comparable as regards their action with that of the gastric juice and other animal solvents had been ascertained. As a result of the inquiry, the Home Secretary has requested the manufacturers of pottery to abandon the use of raw lead; and in view of the facts brought to light by the examination of the fritts and glazes, he has expressed the intention of prescribing that in future such glazes shall conform to a standard of insolubility as regards lead.

Besides a paper on The Presence of Fluorine in the Mineral Waters of Spain and Portugal, a preliminary account of researches on the subject has been published by A. J. Ferreira da Silva and Alberto d'Aguilar. M. Parmentier mentioned the presence of fluorine in considerable quantities in the waters of the springs of Gerez. M. Ricardo Jorge regards these waters as the most fluorized waters in Europe, and estimates that they contain four times as much fluorine as those of Carlsbad. This author has tabulated, from this point of view, the values of other similar springs in Europe, and has further shown by experimental research the therapeutic action of the alkaline fluorides, thus clearing up the mystery which enveloped the salutary action of these waters. One of the authors of the paper now under consideration found in the spring at Campilho, at Vidago, fluorine in much greater quantity than it had been found in other springs in northern Portugal. Dr. Casares Gil has found fluorine in quantities corresponding, but a little exceeding, that found at Gerez. He believes that fluorine is to be found in many mineral waters in much higher proportions than has been observed up to the present, and that for this reason many analyses should be revised. He suggests that the reasons fluorine has not been more generally detected in springs are because it has not been carefully looked for, and because the action of hydrofluoric acid on the glass has been chiefly relied upon as the test, while in the usual method of analysis by treatment with concentrated sulphuric acid, not hydrofluoric acid is given off, but fluoride of silicon, the action of which on glass is barely noticeable.

A specimen of soot from an ordinary household chimney in Birmingham, England, analyzed by H. Worth, yielded totals of 7.4 per cent. of ammonium salts and 1.3 per cent. of fixed soluble salts. The fixed salts consisted of sulphates and chlorides of sodium, magnesium, calcium, and iron—more sulphates than chlorides (3 to 1). This circumstance explains the almost total absence of sulphates among the volatile portion. The sulphur trioxide was chiefly retained by the nonvolatile metals, and thus it is that the volatile portion consists of nearly pure ammonium chloride. The proportion of ammonium salt in the soot is large enough to justify the esteem in which soot is held as a plant manure.

A reaction of cotton-seed oil, described by S. A.

van Kettel in 1897, is based on the presence in a number of fatty oils of minimal quantities of pentosanes which are not contained in fats of animal origin. These pentosanes may easily be detected by means of a hydrochloric solution of phloroglucine. Shortly after this the author's attention was directed to a reaction discovered by Halphen, in which equal volumes of the oil under examination, amylic alcohol, and sulphide of carbon containing 1 per cent. of sulphur in solution, are heated in a boiling salt-water bath for ten minutes or a quarter of an hour, when, if a red or orange color is produced, the presence of cotton-seed oil is indicated. For detecting cotton-seed oil in butter, the author dissolved a quantity of butter in benzene, and after having filtered the liquid obtained and driven off the benzene by evaporation, added Halphen's reagent to the melted fat and heated half an hour in a boiling-water bath. In 20 experiments made he discovered cotton-seed oil in only one sample. The commercial oils are submitted to a series of manipulations for the purpose of improving the smell, taste, and color, and oils thus treated give negative results with colored reactions.

Miscellaneous.—Attention has been called by Thomas B. Stillman to important variations in the composition of Paris green under the increasing consumption which has been stimulated by its extensive use in horticulture as an insecticide. The article as formerly prepared for pigment purposes was of uniform composition, or nearly so; but of late years, since it has been hurriedly manufactured in enormous quantities, variation in composition has become very marked. The commercial product now fails in many instances as an insecticide; for, when arsenious oxide is present in it combined as arsenite, in certain percentages, its action is nullified. When pure, the composition of Paris green may be stated as an aceto-arsenite of copper—a combination of arsenious acid 58.65 per cent., oxide of copper 31.29 per cent., and acetic acid 10.06 per cent. A part of the arsenic may exist as arsenic acid as well as arsenious acid, and copper suboxide may be present in small amounts. Adulteration, in the sense of foreign material added, is rare with manufacturers of Paris green in the United States. The cost of production is lessened by increasing the percentage of arsenic, while the effectiveness of the product as an insecticide may be diminished. Paris green manufactured in Germany is often adulterated with barium sulphate. The chemical examination of Paris green is comparatively simple, since it is soluble in slight excess of ammonia, forming a dark-blue solution; the chemical examination of a sample containing other pigments may or may not be a complex undertaking according to the number of materials that are added. When Paris green is intended for a pigment, foreign substances may be introduced to modify the color, as when chromate of lead is added to lighten it.

An instance is given by E. T. Allen in which a number of analytical weights of gold-plated brass, put away for the summer in an iron safe, were found, at the end of three months, to have been attacked with moisture. The tops of all the weights were covered with a white substance which could not be removed by brushing or rubbing, and which, when scraped off, proved insoluble in water, but soluble in hydrochloric and nitric acids. The weights were, moreover, abnormally heavy. The presence of organic matter was revealed on heating upon platinum foil. Other tests showed that the substance was some compound of zinc—probably, it was thought, the hydroxide mixed with mold, or a zinc salt of some organic acid. The action was evidently due to water and

mold, which were certainly present. It is well known that plated metals at exposed points are more liable to corrosion than either metal alone, owing to electrolytic action. In such cases it is of course the more positive metal which is attacked. This was true in the case under consideration; the zinc was attacked, while the copper and the gold were unaffected. A microscopic examination showed that wherever corrosion had touched the weights the gold had become granulated or blistered. The author refers to a case somewhat similar to this, described by Witter, in which the amalgamated plates of a stamp mill in Småland, Sweden, were attacked by the water used, which had its source in a peat bog.

A paper on The Driving Energy of Physico-chemical Reaction and its Temperature Coefficient is contributed to the Proceedings of the American Academy of Arts and Sciences by Prof. Theodore William Richards. In it the author, starting with the close similarity between the equations of Clausius and Van t' Hoff, points out the advantages, previously recognized by Arrhenius, of considering pressure to be the fundamental quantity which determines the progress of chemical reactions; and this aspect is believed to afford a more direct method of analysis than the study of volume, concentration, or energy. An expression called the "reaction metatherm" is evolved, which represents in terms of pressure the temperature coefficient of the equilibrium ratio of ideal physico-chemical reaction. The equation obtained is the mathematical expression of the theorem of Maupertuis or Le Chatelier, and when analyzed it shows that the part played by each substance in a reaction may be considered as the logarithm of the product of its "physico-chemical potential," and is actually present pressure. The reaction metatherm may be simplified into a reaction isobar, according as the pressure or volume is kept constant during the reaction. While, however, the reaction isobar offers the most convenient basis for calculations to which it is applicable, results under constant volume are more conveniently calculated if the reacting substances are expressed in terms of concentration according to the equation of Van t' Hoff.

In the course of the president's address before the Society of Chemical Industry, Prof. Chandler, speaking of the work of American chemists, said that many important investigations in agricultural chemistry had been conducted by the chemical division of the United States Department of Agriculture. Among them were the practical determination of the number and activity of the nitrifying organisms in the soil, the influence of a soil rich in nitrogen on the nitrogen contents of a crop, the manufacture of sugar from the sorghum plant, and the comparative study of the typical soils of the United States. Chemists connected with agricultural experiment stations had done a large amount of original investigation on subjects more or less closely allied to agricultural and physiological chemistry. The author referred to the progress that had been made here in electro-chemistry, to the method of reducing aluminum practiced at Niagara, to the manufacture of corundum and artificial graphite, and to the expansion in the manufacture of water gas, which is used in whole or in part by 500 gas companies.

CHILL, a republic in South America. The Congress consists of a Senate of 32 members and a House of Representatives containing 94 members, the Senators elected for six years in the provinces and the Representatives for three years in the departments by the direct vote of the adult male population. The President is elected for five

years by the indirect vote of the nation. Federico Errazuriz was elected for the term ending Sept. 18, 1901. The Cabinet, constituted in September, 1899, was composed as follows: Prime Minister and Minister of the Interior, Rafael Sotomayor; Minister of Foreign Affairs, Worship, and Colonization, Rafael Errazuriz-Urmeneta; Minister of Justice and Public Instruction, Francisco Heriboso; Minister of Finance, Manuel Salines; Minister of War and Marine, Carlos Concha.

Area and Population.—The area of Chili is 290,829 square miles according to the most recent estimate. The population on Jan. 1, 1899, was estimated at 3,082,178. The estimated population of Santiago, the capital, was 311,704; of Valparaíso, 140,262; of Concepción, 51,781. Of a total population of 2,712,145 enumerated in 1895, the town population was 1,240,353 and the rural 1,471,792. The number of marriages in 1898 was 13,921; of births, 104,536; of deaths, 83,919; excess of births, 20,617. The number of immigrants in 1897 was 870. The Government grants land to immigrants, and money aid to the extent in 1898 of 616,890 pesos.

Finances.—The ordinary revenue in 1898 amounted to 88,472,693 pesos, and expenditure to 87,726,307 pesos. Including a balance of 28,939,594 pesos from the preceding year and 58,978,777 pesos of loans, the total receipts were 176,391,064 pesos. The total disbursements, including 11,968,077 pesos of special expenditure, 14,415,715 pesos of extraordinary military and naval expenditure, and 45,940,991 pesos of advances to banks and exceptional expenditure for financial purposes, were 160,051,090 pesos. The ordinary revenue for 1899 was estimated at 80,872,937 pesos in gold, of which 64,698,357 pesos were derived from customs and 16,174,580 pesos from premiums, and 19,700,000 pesos in paper. The estimated expenditures were 4,267 pesos in gold and 9,305,286 pesos in paper by the Ministry of the Interior, 712,067 pesos in gold and 512,140 pesos in paper by the Ministry of Foreign Affairs, 5,000 pesos in gold and 631,138 pesos in paper for public worship, 527,300 pesos in paper for colonization, 39,480 pesos in gold and 3,804,190 pesos in paper for justice, 28,406,994 pesos in gold and 5,933,417 pesos in paper for public instruction, 78,932 pesos in gold and 4,655,707 pesos in paper for finance, 13,185,156 pesos in paper for the army, 9,053,739 pesos in paper for the navy, 767,822 pesos in paper for industry, 4,323,786 pesos in paper for public works, and 12,550,892 pesos in paper for railroads; total, 29,246,740 pesos in gold and 65,259,573 pesos in paper. The ordinary revenue for 1900, according to the budget estimate, was 95,954,390 pesos in paper, reckoning the premium on gold at 10 per cent.; extraordinary revenue, 22,404,386 pesos; making a total of 118,358,776 pesos in paper. The estimated expenditure was 104,251,423 pesos in paper. The chief source of revenue is the taxation imposed on the nitrate industry. The treaty of Ancon, signed on Oct. 23, 1883, provided that the Peruvian provinces of Tacna and Arica were to be held by Chili for ten years, at the end of which a plebiscite was to be taken in the provinces to determine their future ownership, the country chosen by the people paying the other \$10,000,000. The financial difficulties of Peru have among other reasons prevented the fulfillment of this clause of the treaty. Some Peruvian politicians have been willing to appeal to the United States to intervene and compel Chili to fulfill the terms of the treaty. The duties collected by Chili from exports of salt-peter and iodine from Tarapaca since the occupation of the nitrate fields in 1879 and those which may be collected during the next thirty-five years

are estimated by a Peruvian diplomatist at \$2,350,000,000, and those collected and to be collected in the Bolivian province of Antofagasta at £650,000,000. A convention for the purpose of carrying out the plebiscite was signed at Santiago on April 16, 1898, but new difficulties have since arisen.

The foreign debt on Dec. 31, 1898, amounted to £18,070,080 sterling, equal to 244,934,400 pesos, paying 4½ and 5 per cent. interest, a small portion even 6 per cent., the total interest charge being £965,455 or 12,872,733 pesos. The internal debt amounted to 72,892,119 pesos.

The Army and Navy.—By the law of 1897 the strength of the regular army is limited to 9,000 men, organized in 10 infantry, 8 cavalry, 5 artillery, and 1 coast artillery regiments, the corps of engineers, and invalid corps. The number of officers is 884. The infantry weapon is the Mauser rifle. The navy consists of 5 armor clads, 2 second-class and 2 third-class cruisers, 11 gunboats, 4 destroyers, and 15 first-class and 4 second-class torpedo boats.

Commerce and Production.—Agriculture employs about half the population. Wheat is the principal crop, but other cereals are grown as well as vegetables and fruits in abundance. The nitrate output in 1899 was 1,360,000 tons. In Valparaíso and its environs are sugar mills, gas works, breweries, machine shops, and other industrial establishments. The total value of imports in 1898 was 102,262,058 pesos, reckoning the peso at 37 cents; exports, 168,069,431 pesos. The values of the principal imports were 7,034,909 pesos for white cotton goods, 3,301,720 pesos for cattle, 2,966,419 pesos for bags and bagging, 2,696,201 pesos for machinery, 2,395,453 pesos for oil, 2,195,335 pesos for Japanese kimono, 1,556,635 pesos for cassimere, 1,457,808 pesos for candles, 1,347,106 pesos for tea, and 407,053 pesos for wines. The export of nitrates was valued at 90,675,297 pesos; copper bars, 20,600,103 pesos; copper concentrates, 861,999 pesos; copper ore, 2,022,730 pesos; gold, 2,445,735 pesos; wheat, 7,696,460 pesos; beans, 1,163,211 pesos; nuts, 576,305 pesos. The exports of copper ores in 1898 showed an advance over 1897, and in 1899 they were nearly 15,000 tons more than in 1898, amounting to 35,290 tons. Mines that were closed have been reopened, new companies formed, and more scientific and economical methods introduced. Mining machinery is now turned out by local foundries established by Englishmen.

The trade with the chief foreign countries, valued in pesos reckoned at 76.8 cents, was in 1897 as follows, the total imports for the year having been 65,502,805 pesos and exports 64,754,133 pesos:

COUNTRIES.	Imports.	Exports.
Great Britain.....	29,073,000	42,002,000
Germany.....	16,474,602	10,855,000
United States.....	4,450,645	3,393,000
Peru.....	4,681,287	1,468,000
France.....	2,679,636	2,785,000
Argentine Republic.....	3,308,268	322,000
Brazil.....	582,771	368,000
Italy.....	780,311	60,000

Navigation.—The number of vessels engaged in foreign commerce entered at Chilean ports in 1897 was 1,734, of 3,140,760 tons; cleared, 1,628, of 2,943,514 tons. The tonnage of coasting vessels entered was 7,233,911. English and Chilean steamers trade between Chilean ports and other parts of the west coast of South America, and English, German, and French lines run between Chilean and European ports. The commercial navy of Chili consisted on Jan. 1, 1899, of 51 steamers, of

26,744 tons burden, and 111 sailing vessels, of 40,333 tons.

Railroads, Posts, and Telegraphs.—The length of railroads in operation in 1898 was 2,662 miles, of which 1,223 miles belonged to the Government. The Government railroads cost 84,902,425 pesos to build. The receipts in 1898 were 13,738,667 pesos; expenses, 12,788,749 pesos.

The post office during 1898 forwarded 12,454,050 letters and postal cards, 16,020,957 packets of printed matter, and 1,423,904 other packets. The postal receipts were 953,128 pesos; expenses, 1,028,333 pesos.

The telegraph lines, belonging to the Government, had a length of 9,968 miles, with 11,200 miles of wire, in 1898. The number of messages for the year was 1,181,960. Railroad and private lines had a length of 2,613 miles.

Political Affairs.—The dispute with the Argentine Republic with regard to the boundary in Patagonia, which endangered the peace between the two nations and led to the acquisition of expensive armaments, naval and military, on both sides, was finally referred to the arbitration of the British Government, which appointed arbitrators, who met in February, 1900. The questions pending with Peru and Bolivia were still the subject of negotiation. The Chilean Congress began its session on June 2. The state of the country was described by President Errazuriz in his opening speech as satisfactory. A surplus of £1,000,000 sterling was on hand, besides a special fund for the conversion of the paper currency, which had been accumulated without difficulty. The Government intended to bring in measures for an extraordinary amortization of the public debt.

CHINA, an empire in eastern Asia. The Government, as laid down in the regulations of the Tsing dynasty, is based on the government of the family, and in theory the Emperor exercises supreme paternal authority. The principles and system of government were taken over by the Manchu conquerors from the Ming dynasty, and have been established since the age of Confucius. The acts of government are largely regulated by precedents running back thousands of years. Imperial affairs are under the direct control of the Cabinet, called Neiko, consisting of 4 members, 2 of whom must be Manchus and 2 Chinese. They are advised by 2 members of the Hanlin College, whose function it is to see that all edicts and proclamations conform in style and substance with dynastic regulations and Confucian precepts. All important questions are decided by the Grand Council, the Chun-Chi-Chu, under the Ming emperors a purely civilian body, becoming a military council after the conquest of 1644, and now again civilian in its character and functions, but having control over the Manchu army. Unless the Emperor is a strong and resolute ruler, this council, composed of 5 or 6 of the highest officers of state, both Manchus and Chinese, wields the real authority of government. The business is transacted in secret, usually in the presence of the Emperor. Decrees and orders are issued in the Emperor's name to the executive boards in Peking and to the provincial authorities, and the Emperor is practically constrained to accept the decisions of his council, which in recent years always includes one or more of the princes of the royal family who hold the highest commands in the Banner army. Subordinate to the Cabinet are the boards of administration, presided over each by a Manchu and a Chinese. One board, called the Civil Office, supervises the conduct and administration of the officials, confers titles, and grants rewards and precedence for meritorious conduct; another, the

Board of Revenue, manages the finances; the third, the Board of Rites, enforces the laws relating to the ceremonies of the court and all public functions ordered by the Emperor, and regulates the rites called for by an eclipse or any national calamity; the fourth, the War Board, has charge of military affairs and directs the movements of troops; the fifth is the Board of Public Works; the sixth, the Board of Punishments, is the high court of criminal jurisdiction. A seventh board, the Admiralty Office, created in 1885, sits at Tientsin and directs naval affairs. The board of censors, consisting of 40 to 50 members, presided over also by a Manchu and a Chinese, is independent of the Government, the members having the duty of watching over all branches of the administration and the right to present remonstrances and memorials to the Emperor regarding any public need or evil or any relapses from the ancient standards. Their duty is to keep the Emperor informed of all that is going on in any part of his dominions that is worthy of his notice, and in particular to keep an eye on malfeasance or oppression on the part of the officials. The Tsung-li-Yamen, or Foreign Office, is a modern body which since 1861 has conducted all business with Western nations and with institutions directed by foreigners, such as the Maritime Customs and the Peking University. It is composed of all the members of the Grand Council and about as many other high officials.

The Celestial Empire and the Middle Kingdom are names that the Chinese give to their own country, which they believe to occupy the greater part of the earth and to contain most of its inhabitants. The Emperor of China is not only regarded as the father of his people, possessing in theory all the property and the power of life and death over his subjects, but he is also the Son of Heaven, the only human being who can mediate with the celestial powers by sacrificing on the altar of heaven. China does contain over a fourth of the earth's population, but has long been the fountain of Asiatic civilization. The rulers of Asia have willingly acknowledged a formal vassalage to the Celestial court. When trade first brought European governments into relation with the Peking authorities the envoys of Europe, partly through ignorance and partly because they saw no other way of facilitating their immediate business of securing trading advantages for their countrymen, accepted the position that was accorded them, that of representatives of vassal states. The Chinese, judging Europeans from their greed of money and the grosser vices exhibited by them in the seaport towns, finding them, moreover, entirely ignorant of the elaborate forms of respect displayed by Chinese toward one another and of all Chinese standards of culture and refinement, regarded them as a low order of beings, outside barbarians, foreign devils who brought ill luck. While Europeans unwittingly offended Chinese proprieties and roused superstitious repugnance in countless ways, they were the unconscious objects of incessant insult and contemptuous derision. The treaty of Tientsin, signed after the occupation of Peking by British and French troops in 1860, first recognized the right of European governments to maintain embassies in Peking, as well as that of foreign traders to reside in Canton, Amoy, Fuchau, Ningpo, and Shanghai. Russia, for her friendly attitude toward China during the war, obtained the cession of the Amur province, and a few years later acquired the northern Manchurian coast lands with the harbor of Vladivostok. All eastern Siberia was Chinese until the Russians occupied it in the time of Peter the

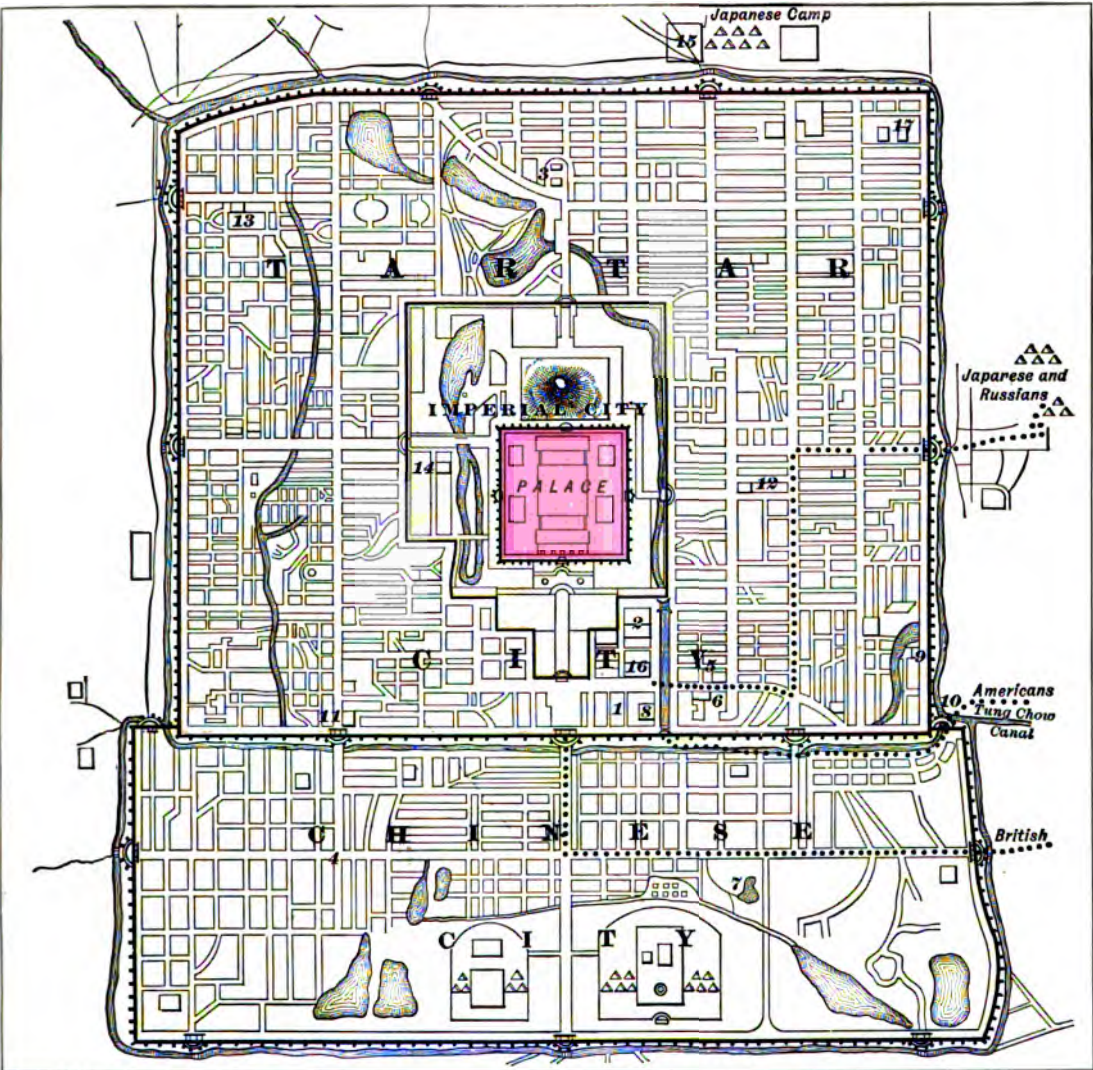
Great, about contemporaneously with the seizure of Macao by the Portuguese, who also conquered Formosa, which later fell to the Dutch and was retaken from them by the Chinese. After the war of 1841 Hong-Kong was ceded to Great Britain. This war was waged against China by the English chiefly for the purpose of removing the imperial interdict against the importation of opium. When its importation was legalized once more, the Emperor issued edicts prohibiting its use, which, however, could not be enforced. The war of 1856 was likewise occasioned in part by the necessity felt by the British for preserving the opium trade and the revenue derived from it by the Indian Government. Cambodia, Annam, and later Tonquin, once tributary countries, were wrested from China by France, while Great Britain conquered first Lower Burma, the tributary Himalayan states, and finally Upper Burma, and Chinese influence in Central Asia receded before Russian conquests. Despite these successive encroachments of the military powers of Europe the Peking court still maintained its arrogant reserve. European ambassadors were not received in audience by the Emperor till 1873, and then only in a pavilion outside of the palace. In 1890 the present Emperor, on coming of age, received them in the building where envoys from Korea and Annam have been accustomed to present the annual tribute to the Son of Heaven. In 1894 the foreign ambassadors were first admitted within the portals of the palace. Diplomatic business can only be done with the Tsung-li-Yamen, the board created for the purpose after the signing of the treaty of Tientsin. This board consisted at first of 3 members, and now it has 11. Although strengthened by the inclusion of members of the Grand Council, still it possesses no real power, as all its decisions must be approved by the Grand Council and ratified by the Emperor.

In 1897 Russia, having intervened after the Japanese victories to preserve Manchuria for China, obtained, in connection with the privilege of building a branch of the Siberian Railroad through Manchuria to a seaport on the Gulf of Pechili, a lease for ninety-nine years of the seaport of Talienwan to serve as the terminus of the railroad and also of the military harbor of Port Arthur. Germany, in the guise of retributory damages for the murder of two missionaries by a mob, demanded and obtained the port of Kiaochau, after landing troops there in the spring of 1898, and preferential commercial and political rights throughout the peninsula of Shantung, thus establishing a claim to a sphere of influence in China. The British Government, receding from the position of the open door which it had first taken in opposition to the Russian and German claims to exclusive spheres, acquired a lease of Wei-Hai-Wei, a naval port on the Gulf of Pechili, on the identical terms of the lease of Port Arthur to Russia, and an agreement by the Chinese Government never to alienate any of the territories in the provinces adjoining the Yangtse-Kiang to any other power, whether under lease, mortgage, or any other designation. The French Government, which as protector of Roman Catholic missionaries and as an active and important military power formerly had more frequent diplomatic dealings with China than any other, though French trade in the country was comparatively small, and which had engaged in hostilities with China on account of the participation of the Black Flags in the Tonquinese rebellion, now demanded and obtained a coaling station on the mainland opposite the island of Hainan, also on a ninety-nine-year lease. The nonalienation assurances

which had already been obtained regarding Hainan were extended to the Chinese provinces adjoining Tonquin. Great Britain, asserting that parts of these provinces of Kwangtung, Kwangsi, and Honan lie in the Yangtse valley, and unwilling to concede to France preferential treatment in the trade of the West river or in territory adjacent to Burma as well as to Tonquin, demanded compensation in the shape of an extension of the Kaulung settlement opposite Hong-Kong, and an assurance, identical in terms with that given to France, that two of the provinces would not be alienated. Japan, which after the victorious war of 1895 had been forced by European intervention to be content with the cession of Formosa, secured the promise now that the provinces opposite that island would never be alienated to any other nation, but did not seek any preferential economical advantages in those provinces. Italy put forward a demand for a coaling station on lease, and this, though formally supported by Great Britain, was contemptuously refused. Thirteen out of the 18 provinces of China have thus been marked out as spheres of influence by various European powers, and innumerable mining, railroad, and commercial concessions have been granted to foreigners. The number of treaty ports has gradually been increased to 32, some of them situated far in the interior, where the people have never yet come into contact with Europeans.

The Imperial Government at Peking has retained its authority, aside from the sentimental or symbolical reverence which Chinamen are bound by tradition to pay to the Emperor, by means of its controlling the only efficient military force in China, the Manchu banner troops of the imperial province, and by the complete control that it exercises over the official hierarchy, for the most powerful viceroy must submit to removal or degradation. This power, however, is used only for reasons that command the general approval of the official class, the support of which is the main security of the Manchu dynasty. The Imperial Government has never ventured to advance to high office any favorite or tool, but only those who have entered the service by the recognized channel and risen through the regular stages and are therefore imbued with the traditional principles of government and the bureaucratic spirit. The Chinese people have never willingly submitted to the Tartar conquerors. There have been four serious rebellions, the last of which, that of the Taipings, was only suppressed by the aid of European support. The great secret societies of China—the White Lily, the Triad, the Redhead, and others—were started with the object of expelling the Tartars and restoring a Chinese dynasty. Still, the Manchu rule has not been oppressive, and in recent times it has been weak. Except the tribute rice, the Chinese contribute little to the support of the imperial clan and the Manchu army.

For the last forty years the Empress Dowager and her clique have managed imperial affairs. Tsu-Hsi, born Nov. 17, 1834, was a secondary wife of the weak Emperor Hien-Feng, who died in Mongolia, whither he had fled when the British and French troops occupied Peking. The law of succession in China permits the Emperor to select his successor from among the sons of his first three wives. Tsu-Hsi, originally a concubine, had been raised to the dignity of a secondary wife on giving birth to a son, who was the only heir to Hien-Feng, and on his father's sudden death was declared Emperor under the style of Tung-Chih. As he was an infant, the first Empress and his own mother ruled as co-regents, but the latter,



MAP OF THE CITY OF PEKING, CHINA.

by her imperious will and talent for intrigue, wielded all the authority, even independently of the Manchu party which originally supported her. When her son died, on Jan. 22, 1875, after a nominal reign of fourteen years, she selected as his successor the son of Prince Chun, who was proclaimed Emperor under the designation of Kwangsu, meaning continuation of splendor. This infant Emperor was born Aug. 2, 1872, and his aunt was continued in the regency until he ascended the throne in 1887, but in ostensibly resigning her powers she retained the essential part of the prerogative, the great seal and the right to appoint all the principal civil and military officers. In 1898 the young Emperor, who had come under the influence of the reform party, which aimed at the regeneration of the civil and military services through the adoption of Western methods as the only means of rendering China strong enough to resist the encroachments of the European powers, called some of the reformers into his council and issued a series of edicts embodying the reform principles. The startling changes that he decreed alarmed the conservative element in the official world and created consternation among corrupt mandarins and Manchu nobles, who saw their emoluments and sinecures threatened. Combining with the Empress Dowager, they compelled the Emperor to rescind his decrees, which were formally rejected by the Grand Council, and to resign his power once more into her hands, the military commanders being all on the side of the Empress. Kwangsu was punished with practical imprisonment for having been undutiful to his aunt, and for his attempt to inaugurate radical changes for which China was not yet prepared.

The internal government of the 18 provinces of China proper is practically independent of the imperial authorities. Each province maintains its own civil service and collects its own revenues. The maritime and riverine provinces maintain separate flotillas of war vessels. Every province should have an army, but in most cases this is nonexistent, as the Chinese despise military service, and the pay and rations of rice for the soldiers are treated as a perquisite of the governor, who can collect his nominal quota of men from the riffraff whenever an inspection takes place. At the head of each province is a governor, and in several instances two or three provinces are grouped under a governor general or viceroy, such as the Viceroy of Nankin, who governs the three provinces of Kiangsu, Anhwei, and Kiangsee; the Viceroy of Wuchang, who rules over the central provinces of Hupeh and Hunan; the Viceroy of Chengtu, whose jurisdiction is confined to the great province of Szechuen; and the Viceroy of Canton, who controls the two Kwang provinces. Admission to official life is only obtained through the study of the Chinese classics, which treat largely of ethics and the principles of government, the history and traditions of the Chinese people, and literary refinements and forms. Examinations are held in the provincial capitals twice in three years for the lower degree necessary as a passport to the public service. Although not more than 1 per cent. of the candidates are usually admitted to the degree, there are innumerable literati who must be excluded from office, and these disappointed ones are often the leaders of disaffection and promoters of disturbances. For the higher degrees other examinations are necessary. In the Peking University, European languages, mathematics, and sciences are taught by European, Japanese, and American professors, but all such knowledge is of use to officials only as supplementing Chinese education, and is seldom

sought by those seeking a public career, but young military mandarins attend the military and naval colleges where the methods of European warfare are taught. The Christian mission schools give instruction in the English language and the lower branches of science to those who seek a career outside of China or employment with Europeans. Entrance to the public service and advancement are free not only to Manchus, but to Chinamen of the humblest origin, and until very recently no preference was given to Manchus in appointments to the highest offices in the provinces or in Peking. Chinese officials are expected to fulfill all administrative, judicial, and military duties when required. The lowest provincial officer is the district magistrate, who is at once collector of revenue, judge, coroner, chief of police, and public prosecutor. Death sentences require in ordinary circumstances to be ratified at Peking, though the viceroys and governors are armed with discretionary powers to be used in times of danger. They are charged with the duty of maintaining peace and order within their boundaries, and so long as they do this and carry on the government in accordance with the established rules the central authorities do not interfere with them. Whatever dangers or disturbances occur in other provinces, no governor is disposed to go to the aid of his colleagues without express imperial orders, and even then he often evades the duty. The great body of officials constitutes the actual governing force in China, from which emanate the suggestions for the redress of grievances and the formulation of new legislation. Advice tendered to the throne by the viceroys and governors is invariably heeded. Independently of the Manchu Government, with which the people of the prosperous central and southern provinces do not come in contact, independently even of the provincial administrations, the Chinese possess a very large measure of municipal self-government and a degree of individual liberty scarcely equaled elsewhere. The principle of association in trade guilds and societies for mutual aid and protection is developed to a far higher degree than in the Occident, and through their clubs and fraternities, of which only the secret organizations are interdicted but not suppressed, they exert much influence in public affairs.

All general legislation in China is enacted by imperial decrees. The penal code is the only body of statutory law in existence, and this is supposed to contain provisions to meet every case. If, however, a difficulty arises for which there is no precedent, it is referred to the board concerned, which in turn reports to the throne, whereupon a decree or rescript is issued which settles the case. From time to time the code is revised, and these various decrees are consolidated or incorporated, becoming part of the statute law.

Finances.—Provincial administrative autonomy is carried so far that the Imperial Government has no effective money revenue of its own, and must depend on the quotas that it can assess on the provinces. The Maritime Customs revenue, collected under European management, is now pledged to the foreign bondholders who loaned money to pay the Japanese war indemnity, and for other needs growing out of the defenseless state of the empire. The money for the support of the Manchu troops, as well as for the support of the imperial household itself, must be drawn from the provinces. The practice has been for the Board of Revenue to indent annually for the sums required for the use of the central Government, a certain amount being assessed on each province according to its supposed means. Google

long as the amount did not vary greatly from year to year and was remitted in case of flood or famine occurring in any province, imperial aid being given instead of a tax demanded when the disaster was grave, the assessments were paid with some punctuality. When more and more was asked for, it was only obtained with increasing difficulty. The expenses of local government had first to be provided for, and the demands of the Peking Government could only be met out of the surplus, or, if there was no surplus, by increased taxation, with its attendant unpopularity and risk of rebellion. The viceroys and governors have power to resist demands for fresh taxation from Peking, for, though one of them be deposed, his successor would be prompted to repeat the refusal, such is the solidarity of interest that pervades the whole civil service. Of the revenue collected by the provincial officials, it is supposed that they retain from 50 to 70 per cent. as costs or perquisites. An estimate of the revenue of the Imperial Government for the years immediately preceding the Japanese war made the average total amount 88,979,000 haikwan taels of the par value of about 45 cents. Of this total, 25,088,000 taels in silver and 6,562,000 taels worth of grain come from the land tax, which varies in different provinces from 25 cents to \$1.50 per acre. The duty and likin tax on salt yield 13,659,000 taels, salt being a monopoly of the Government, which buys up the whole product and resells to merchants at a price covering the duty. The likin, or tax on merchandise in transportation, payable at appointed barriers, produces 12,952,000 taels a year, including a tax on production that is now united with it. The receipts of foreign maritime customs are about 21,952,000 taels a year. Native customhouses have been accustomed to collect 1,000,000 taels, the duty and likin on native opium is 2,229,000 taels, and various other duties yield 5,550,000 taels. The disbursements of the Imperial Government were apportioned according to the same estimate, as follows: imperial household, Manchu garrisons, and administration of the metropolis, 19,478,000 taels; admiralty board for the Peiyang squadron, 5,000,000 taels; southern naval squadrons, 5,000,000 taels; forts, guns, and coast defense, 8,000,000 taels; defense of Manchuria, 1,848,000 taels; Kansuh and Central Asia, 4,800,000 taels; aid to Yunnan and Kweichau, 1,655,000 taels; interest and repayment of foreign loans, 2,500,000 taels; railroad construction, 500,000 taels; public works, river embankments, sea wall, etc., 1,500,000 taels; customs administration, including maintenance of lighthouses, beacons, and revenue cruisers, 2,478,000 taels; administration of the 18 provinces, including cost of troops, 36,220,000 taels; total, 88,979,000 taels. Since these estimates were made the foreign debt has been greatly increased, the expenditure for military purposes and on railroads, telegraphs, etc., has swollen enormously, and changes have been made in the collection of taxes, principally the likin on imported merchandise, which by the convention of March 2, 1898, is collected in the ports of Suchau and Kiukiang and in the Shanghai district and eastern Chekiang, as also is the salt likin in the districts of Hupeh and Anhui and the port of Ichang by the Imperial Maritime Customs, which expects to obtain a revenue therefrom of 5,000,000 taels. The only public accounts of which reports are published are those of this branch of the service, which is superintended by Sir Robert Hart. The public debt of China has been raised mainly for the purpose of paying the Japanese war indemnity. Before the war a loan of 5,000,000 marks

at 5½ per cent. was contracted in Germany in 1887, and a silver loan of 11,300,000 taels was obtained abroad in 1894 at 7 per cent. In February, 1895, a gold loan of £3,000,000 was raised on the security of the customs, which were further pledged for advances amounting to upward of £2,000,000 obtained from banks and foreign syndicates. Internal loans amounting to nearly £5,000,000 were raised at the same time. After the close of the war, in order to pay the indemnity of 200,000,000 treasury taels and 30,000,000 taels for the evacuation of Liao-Tung, a foreign loan of £15,820,000 was raised at 5 per cent., and in March, 1896, an Anglo-German loan of £16,000,000 was contracted, which was followed on March 1, 1898, by another loan of £16,000,000 raised through English and German banking corporations doing business in the East, for the purpose of paying off the last installments of the war indemnity and secured on the likin collections transferred to the Imperial Maritime Customs. Foreign merchants have brought diplomatic and financial pressure on the Chinese Government to induce it to do away with the likin taxes, which are a greater incubus on trade than the similar *octroi* duties ever were in Europe. The Chinese Government on its part has tried to induce foreign governments to consent to an increase of the customs duties. The import duty on foreign merchandise is fixed by treaty at the uniform rate of 5 per cent. *ad valorem*, and the commuted likin duty, payable at the port of entrance at 2½ per cent. Merchants have discovered that the payment of likin commutation does not altogether exempt their goods from further taxation in the interior, because the provincial mandarins, unwilling to sacrifice the revenue formerly derived from likin, have imposed or revived various other taxes in the place of likin. In May, 1900, Chinese commissioners were authorized to offer to abolish likin and all further charges on imports if the European governments would consent to an increase in the import duty from 5 to 10 per cent., and in the transit pass or commuted likin duty from 2½ to 5 per cent., making 15 per cent. in all. The export duty they proposed to fix at 5 per cent., as the treaty allows, although lower rates have been charged. The Maritime Customs collections for 1899 showed an advance under every heading, the total amounting to 26,661,460 taels.

The Army.—The principal military organization of China is the Army of the Eight Banners, descendants of the Manchu conquerors and their allies, subdivided into Manchu, Mongol, and Chinese groups, and constituting a military caste in which intermarriage is compulsory. This army, which is recruited constantly from among the population of Manchuria, is supposed to number 300,000 men, of whom from 80,000 to 100,000 have in recent years received a training in European fashion and been armed with modern weapons and kept on a war footing. This Manchu army is under the direct control of the Imperial Government at Peking, and, with the exception of garrisons in chief cities of the center and south, is quartered in the imperial province. The national army, or Army of the Green Flags, is the name of the Chinese force which the governors and viceroys are required by law to raise in each of the 18 provinces, and which some of them have raised, armed, and drilled in accordance with modern methods; some have trained in the old Chinese way, and some have neglected, keeping only a nucleus and pocketing the pay of the rest of the contingent. The nominal strength is 660,000 men, of whom about a third are available. The most important force is the Wuwei army, or Grand

Army of the North, stationed ordinarily at Tientsin, Taku, and other places convenient for the defense of the capital province against invasion. These troops are taught by European instructors and have the best of modern arms. In 1899 they numbered 50,000, and afterward 20,000 more were incorporated. In emergencies, mercenary troops are raised which display varied efficiency and discipline, according to the nature of the population among which they are recruited, the ability of their commanders, and the kind of service they are called upon to perform and the experience they acquire. There is also an irregular cavalry, mostly Mongolian, nominally 200,000 strong, but really not more than a fifth or a tenth as many, and of slight military value. The total of the armed forces is estimated at 1,752,000, but there is no effective central authority, no common organization, little discipline except among the picked corps, and outside of these only obsolete training and armament, worthless against modern arms and tactics. Large numbers of European arms have been acquired by the Government within the last two years, and the proportion of soldiers who have these and are able to use them with more or less skill has been more than doubled. About 900,000 Mauser rifles have been imported since 1897. The field army in active service in north China is 205,000 strong, composed of 50,000 Manchurian regulars, 20,000 irregular troops, 10,000 disciplined troops in the capital, and 125,000 other active troops in the capital and neighboring provinces, including the foreign-drilled detachments of Gen. Nieh and Gen. Yuan-Shih-Kai, intended for the defense of the coast of the Gulf of Pechili. The reserves are composed of 13,000 Pekin field troops, 75,000 of the Eight Flags in the metropolitan province, 95,000 of the Eight Flags in the other provinces, and 506,000 of the Green Flags. Miscellaneous troops, including river and canal guards, transport convoys, 103,000 Manchurian militia, and bodies formed of men of different alien races, number 858,000. The Chinese official statement of the effective troops on the peace footing is 850,000 infantry and artillery and 60,000 cavalry. Many of the cavalry have no horses, and only a few detachments are armed with carbines or rifles. A very small part of the artillery has received special training. Most of the Green Flags are entirely without training, and the same is generally true of the reserves.

Commerce and Production.—Land in China is held in fee simple on payment of an annual tax. Every property is registered, and when it is sold a fee of 6 per cent. of the price is paid for the conveyance. No farm or dwelling can be sold to a stranger until all near relatives have declined to buy. Farms are generally small, and are kept in a high state of cultivation by the aid of irrigation and careful use of fertilizing materials. Oxen and buffaloes are the common farm animals, but tillage is often done by hand with primitive tools. Wheat, barley, corn, millet, beans, and peas are grown in the north, and in the south rice, sugar, cotton, and indigo are common crops. In the west and other elevated sections where the land is suitable the poppy is grown extensively for opium. Tea is cultivated only in the western and southern provinces of Fu-Kien, Hupeh, Hunan, Kiangsi, Chehkiang, Anhui, Kwangtung, and Szechuen. Silk culture is not less important and is carried on in all parts of China, but the best silk, and the main supply, comes from Szechuen, Kwangtung, Chehkiang, and Kiangsu. Filatures with modern machinery have been started in Shanghai and Canton, capa-

ble of winding 1,600,000 pounds of silk a year, and in Canton Chinese and foreign capitalists have large cotton mills in operation, with 313,000 spindles running in 1898.

Coal beds exist in all the provinces. The Kaiping mines, northeast of Pekin, have been operated under European superintendence. Anthracite is mined for the supply of Pekin at Fang-Shan Hsien. Coal is mined also at Poshan, in Shantung, and other fields in that province promise an abundant supply. Shansi has a field of anthracite coal in its eastern section and one of bituminous in the west, each estimated to cover 13,500 square miles, and a British syndicate has been formed to open mines there, while German capitalists expect to develop the Shantung mines. In southeastern Hunan the beds, part anthracite and part bituminous, have an extent of 21,700 square miles, and in some places considerable coal is dug also in the central and northern parts of Szechuen. French syndicates have obtained concessions here. Coal and iron are found together in Manchuria, where a smelting industry has sprung up.

Adjacent to the coal deposits of Hunan are iron mines which have been worked from ancient times. The copper mines of Yunnan have been productive for centuries, and in the same province silver and lead are found.

The imports of foreign merchandise, according to the returns of the Imperial Maritime Customs in 1898, were 209,579,334 haikwan taels in value; exports, 159,037,149 taels. Corrected by deducting the expenses of landing, storing and selling, and duties paid, the value of imports was 184,486,528 taels; and that of exports, when commissions and export duties and the cost of storing, packing, and shipping have been added, was 177,165,384 taels. The values of the principal imports were 39,295,000 taels for cotton yarns; cotton cloth, 38,324,000 taels; opium, 29,255,903 taels; kerosene oil, 11,914,699 taels; rice, 10,449,000 taels; metals, 9,787,077 taels; sugar, 9,019,000 taels; fishery products, 5,430,842 taels; coal, 5,280,620 taels; woolen goods, 3,190,169 taels; raw cotton, 2,839,730 taels; matches, 2,597,000 taels; ginseng, 2,545,000 taels; tin, 2,179,000 taels. The principal exports were raw silk, of the value of 45,413,000 taels; tea, 28,879,482 taels; silk manufactures, 10,691,000 taels; beans and bean cakes, 7,829,000 taels; skins, 6,820,000 taels; tobacco, 3,839,000 taels; matting, 3,683,000 taels; raw cotton, 3,151,000 taels; coal, 2,462,000 taels; straw braid, 3,131,791 taels; sugar, 2,445,891 taels; shoes and clothing, 1,982,672 taels; paper, 1,741,707 taels; china ware and pottery, 1,504,307 taels.

The direct commerce with various foreign ports and countries in 1898 was valued in haikwan taels as follows:

COUNTRIES.	Imports.	Exports.
Hong-Kong	97,214,000	62,064,000
Macao	3,348,000	5,892,000
Straits Settlements	2,620,000	2,152,000
India	19,136,000	1,824,000
Japan	27,376,000	16,093,000
Siberia	300,000	12,798,000
Russia in Europe	1,454,000	5,005,000
Great Britain	34,962,000	10,716,000
Rest of Europe	9,396,000	25,929,000
United States	17,163,000	11,967,000
Rest of America	1,965,000	368,000
All other countries	3,809,000	5,204,000
Total	218,745,000	159,037,000

Among the imports are included re-exported merchandise of the value of 9,166,000 taels. The figures for Japan include 4,794,000 taels of imports from and 925,000 taels of exports to Formosa.

The trade of Hong-Kong is made up of goods from Europe, the United States, Australia, India, and other countries destined for China, and of Chinese goods to be shipped to those countries.

The foreign trade of China in 1899 was marked by a great development in which the United States participated proportionally more than any other nation except Japan. The total value of imports and exports was 460,533,288 haikwan taels, more than double the figures for 1890. The United States doubled the sales in China in four years, and in 1899 sold 12,000,000 taels more than all Continental Europe. The gains of Japan were twice as great, while British trade has fallen off. The imports credited to Great Britain as well as to Hong-Kong contain a large and increasing proportion of American goods, some of which reach China by way of Japan also. Besides petroleum, cotton cloth, and other staple imports from the United States, a trade has sprung up in condensed milk, which the Chinese consider a dainty, and in American cigarettes, clocks, bicycles, sewing machines, windmills, canned goods, provisions, and other miscellaneous products and manufactures, besides railroad materials and machinery.

Navigation.—The number of vessels entered and cleared at the ports of China during 1898 was 52,661, of 34,233,580 tons, of which 43,164, of 32,896,014 tons, were steamers. Of the total number, 22,609, of 21,265,966 tons, were British; 23,547, of 8,187,572 tons, Chinese; 1,831, of 1,685,093 tons, German; 2,262, of 1,569,134 tons, Japanese; 743, of 239,152 tons, American; and 577, of 420,078 tons, French. The Chinese treaty ports are Shanghai, Chinkiang, Suchau, and Wuhu, in Anwei; Canton, Swatau, Kaulun, Lappa, Pakhoi, Kiungchau, Samshui, and Kongmun, with Kumchuk, in Kwangtung; Amoy and Fuchau, in Fukien; Chifu, in Shantung; Tientsin, in Pechili; Newchwang, in Manchuria; Ningpo, Hangchau, and Wenchau, in Chehkiang; Wuchau and Lungchau, in Kwangsi; Mengtsz and Szemao, in Yunnan; Yatung, in Tibet; Kiukiang, in Kiangsi; Hankau, Shasi, and Ichang, in Hupeh; and Chungking, in Szechuen. The Chinese Government has announced the intention of opening to foreign trade and residence the additional ports of Yochau, in Hunan; Santuao, in Fukien; Chingwangtao, in Pechili; and Wusung.

Communications.—A railroad has been built from Pekin to Tientsin, 80 miles, with continuation to Tangku, 27 miles, thence through a coal district to Shanhaikwan, 147 miles, and along the coast to Chenchau, 113 miles, with a branch to Tienchiaochang, 7 miles, and one of 30 miles to the Nanpao coal mines. The length of lines in operation at the beginning of 1900 was 404 miles. An extension to Yungkau, connecting this line with a branch of the Manchurian line, will be built by the Russians, and another extension from Chenchau to Hsinmintun, 106 miles, brings it near to Mukden. The Russian railroad through Manchuria, connecting the Siberian Railroad with the Chinese ports leased to Russia, is expected to be completed in 1902, the main line having a length of 950 miles, and the branch to Port Arthur a length of 650 miles. The section from Port Arthur to Telin, 318 miles, was finished early in 1900. A line running southwest from Pekin has been completed to Paotingfu, 88 miles, with a branch of 10 miles to the Chaokautien coal mines. Like the Tientsin line, this was built with British capital, but it is to be extended by a Belgian syndicate to Hankau, on the Yangtse-Kiang. An American syndicate has obtained a concession for a line from the Yangtse to Canton. British concessionnaires have undertaken to develop with the

aid of railroads the coal and petroleum fields of Shansi, and to bring coal from the Honan mines to the Yangtse river near Nanking by a railroad running through Kaifong. The short line connecting Shanghai with Wusung, 12 miles, was opened in 1898. A line from Shanghai is projected which will run through Hangchau, Ningpo, and Wenchau to Canton. The French have a project for a railroad to run from Tonquin into Yunnan, through Mengtsz, Wuchau, and Pakhoi.

There are nearly 4,000 miles of telegraph lines, connecting Pekin with Newchwang, Chifu, Shanghai, Fuchau, Amoy, Kashing, Ningpo, Yangchau, Suchau, and the seven treaty ports on the Yangtse up to Chungking; with Canton, Wuchau, Lungchau, and Yunnan Fu, whence a line runs to Manwyne to connect with the system of British India; with Taku, Port Arthur, and Séoul, in Korea; and with the chief places in Manchuria up to the Russian frontier on the Amur and the Ussuri rivers, where connection with the Siberian line affords direct communication with Europe overland, while at Shanghai, Hong-Kong, and other ports connection is made with cables running to Japan, India, and Europe.

The postal business of the country has been carried on by postal carts and messengers under the direction of the Minister of War. Private runners are also employed. In 1897 the Inspector-General of Maritime Customs was commissioned to organize a new postal service, and the Swiss Government was notified by China of her intention of entering the Universal Postal Union.

Declaration of the Open Door.—Secretary Hay, in September, 1899, instructed the American representatives in England, France, Germany, Russia, Italy, and Japan to intimate to the governments to which they were accredited the apprehensions felt by the United States Government of the danger of complications arising between the treaty powers that might imperil the rights assured to the United States by treaty. The representations were made with the express reservation that the Government of the United States did not commit itself to any recognition of exclusive rights of any power within or control over any portion of the Chinese Empire under the agreements recently made by which Great Britain, Germany, and Russia claimed and conceded to each other the possession of spheres of influence or interest, particularly in respect to railroads and mining enterprises. Hoping to retain China as an open market for the world's commerce, with the object of removing dangerous sources of international irritation and thereby hastening united action by the powers at Pekin to promote administrative reforms so greatly needed for strengthening the Imperial Government, in which it was believed that the whole Western world was alike concerned, the United States Government requested the powers claiming spheres in China to declare their intentions with regard to the treatment of foreign trade in those spheres, and invited from each a declaration to the effect that it will in no wise interfere with any treaty port or any vested interest within any so-called sphere of interest or leased territory that it may have in China; that the Chinese treaty tariff of the time being shall apply to all merchandise landed at or shipped to all such ports as are within such spheres unless they be free ports, no matter to what nationality they may belong, and that duties so leviable shall be collected by the Chinese Government; that the power approached will levy no higher harbor dues on vessels of another nationality frequenting any port in such sphere than shall be levied on vessels of its own nationality,

nor any higher railroad charges over lines built, controlled, or operated in its sphere on merchandise belonging to citizens or subjects of other nationalities than are levied on similar merchandise belonging to its own citizens. Lord Salisbury wrote, on Nov. 30, that Great Britain was prepared to make a declaration in the sense desired in regard to all leased territory or spheres of interest at present held or hereafter to be acquired. The German Government, which had already given an assurance that America's treaty privileges would not be impaired, raised no objections, and in December the Count von Bülow wrote a declaration assuring absolute equality of treatment of all nations with regard to trade, navigation, and commerce. The Russian Government answered that it was happy to comply with the wishes of the United States, with the reservation that the leased territory of Talienwan might in the future be separated by a customs limit from the port, which has been declared a free port, duties to be levied in that zone on all foreign merchants alike. M. Delcassé, on Dec. 16, wrote that France was ready to apply equal treatment to the citizens of all nations, especially in the matter of customs duties and navigation dues, as well as transportation tariffs on railroads. On Jan. 7 the Marquis Visconti Venosta expressed Italy's adherence to the American suggestion. The Japanese Government replied that it would assent to the fair and just proposals of the United States. The answers of the various powers were all accompanied by the proviso that the other governments concerned would also agree to make the desired declaration. On March 20 Mr. Hay sent a circular letter to the American representatives abroad, saying that all the powers concerned had accepted the proposals of the United States, and he would therefore consider their consent as final and irrevocable.

Palace Politics.—After the *coup d'état* of 1898 the Empress Dowager, who formerly accepted the guidance of Li-Hung-Chang, Chang-Chih-Tung, and other progressive Chinese statesmen, fell entirely under the influence of the Manchu princes and the most reactionary section of the Conservatives, who proceeded to strengthen the Manchu military forces for the support of the dynasty against either foreign or internal menaces. Of the reformers to whose advice the Emperor had listened, some were executed, some escaped abroad, and others were exiled to the frontiers. The governors and high officials who had leaned toward reform were replaced by Manchus, and the former chief advisers of the Empress were sent away from Peking to provincial posts. The Manchu troops in and about Peking were brought up to a strength of 72,000 men, rearmed with modern weapons and trained in European tactics. They consisted of the Peking field force, 50,000 in all, and the Husheng brigade, 10,000 strong, both under Prince Tuan, and the Imperial Guards, or Banner Corps, 12,000 men in all, under Yung-Lu, who was also generalissimo of the northern forces, and was the most intelligent politician in the entourage of the Empress. On Jan. 24, 1900, the Empress procured the signature of Kwangsu to a proclamation announcing the selection of Pu-Chun, born in 1886, son of Prince Tuan, a brother of Hien-Fung, as heir apparent. This infant prince was declared to be the heir, not of Kwangsu but of Tung-Che. All China scented a plot to put the reforming Emperor out of the way in order to prepare for a new regency under reactionary auspices of the old Empress. Mutterings of remonstrance were heard in every quarter. A month after the announcement of the new crown prince the Empress

Dowager prepared a proclamation dethroning permanently the Emperor Kwangsu, followed by one in his own name declaring his reign a usurpation. Although this new *coup d'état* was sanctioned by the princes of the imperial clan and approved by the majority of the Grand Council, nevertheless it was not carried into effect. The generals of the Nanyang army declared to Viceroy Liu at Nankin that the new Emperor would not have the services of their troops. The officials and *litterati* of Hankow, Hanyang, and Wuchang sent a deputation to Peking to protest. All the officers and notables of Shanghai forwarded a remonstrance, and from all the other centers of wealth and intelligence came similar memorials, followed by appeals to the Chinese everywhere to stand by the legitimate Emperor. The result was that the edicts were withdrawn, and another was issued in which the Prince Pu-Chun was mentioned as heir apparent only.

Edicts issued by the Empress Dowager in the early part of 1900 indicated a complete relapse into old methods. One dated Feb. 7 commanded a return to the ancient method of study according to the teachings of Confucius for examinations for official rank, and imposed penalties for the teaching of what were called the new, depraved, and erroneous subjects. A secret edict was issued by the Empress on Nov. 21, 1899, urging the viceroys and governors of the maritime and Yangtse provinces to be prepared to resist any foreign aggression, giving them authority to oppose with arms hostile acts of foreign forces without first seeking instructions from Peking, and warning them that they would be held responsible if they allowed foreign troops to occupy Chinese territory. Prince Tuan, Prince Chuang, and the other Manchu princes, with the exception of Prince Ching and one or two more, were intensely hostile to Europeans, and were persuaded by Kang-Yi, Tung-Fuhsian, and other officials and generals who took the lead in Peking, that China was strong enough to defy the Western nations. The Chinese statesmen at Peking, such as Wang-Wenshao, Hsi-Ching-Cheng, Hsu-Yung-Yi, though not less anxious to preserve the independence of the empire and retain the territories which European nations claimed as spheres of influence, were aware of the military weakness of China and of the superiority of foreign organization and fighting power. The viceroys and governors of the central and southern provinces held the same opinions. The French had taken summary vengeance in the vicinity of the Kwanchauwan territory leased or ceded to them for the death of two naval lieutenants who fell in a collision with natives when they took possession on Nov. 18, 1899, and fixed their own boundaries. Their action roused the suspicion of the Chinese, who were apprehensive, moreover, that the Italians, disappointed in their ambition to secure Sammun Bay, would seize some other part of the coast. At Wei-Hai-Wei the British early in 1900 proceeded to demarcate their territory without the assistance of Chinese commissioners. The edict of the Empress was followed by orders to provincial authorities requiring them to resist every further attempt to seize Chinese territory and to assist one another in such resistance, and giving them authority to proclaim a state of war, if necessary, without waiting for instructions from Peking.

The concessions of territory and pre-emptive claims to foreign powers had shaken the loyalty of the Chinese toward the dynasty, and especially toward the Empress Tsu-Hsi, who since the *coup d'état* was considered a usurper by a large element among the intellectual Chinese, especially

by the reform party, strong in the center and the south, whose purposes she had frustrated. The anti-foreign crusade begun by the secret society known as the Boxers was begun at a time when the ignorant Manchu Conservatives in Peking were seriously considering the policy of defying the powers and perhaps winning back the alienated seaports, or at any rate checking further encroachments, and by a firm anti-foreign attitude regaining the wavering loyalty of the Chinese provinces. The Government had purchased 128,000 Mauser rifles with 1,000 rounds of ammunition, 105 field guns with 3,000 rounds, and improved guns of large caliber for the Taku forts, which Chinese gunners had been taught to handle by German instructors.

The Boxer Uprising.—The process of slicing China alive, as the Chinese statesman Li-Hung-Chang calls the setting up of territorial claims by European powers, seems to Chinamen to have been started in retaliation for the killing of two German missionaries by a mob in Shantung. In that province a strong anti-foreign feeling was evoked by the action of the Germans, which gave an impetus to a certain secret society that had already evinced strong opposition to the propagation of Christianity by Roman Catholic missionaries, and now adopted a general anti-foreign propaganda. Its name is I-Ho-Chuan—the League of United Patriots—but the last word can also be spoken so as to mean fists, and since athletic contests were practiced by its members foreigners gave them the name of Boxers. The Ta-Tao-Hwei, or Great Sword Society of Shantung, whose membership had been augmented in consequence of the Hoangho flood, and the opportunities afforded for smuggling opium and salt as a relief to the misery caused by it in southwest Shantung, had already taken a threatening attitude toward the missionaries in this province, which, as being the native country of Confucius and Mencius and of a long list of illustrious Chinese statesmen and generals, and the home of a proud and stalwart race, resented sorely the growing pretensions of Germany and the presence of a foreign garrison. This society took advantage of the effort of the governor, in obedience to orders from Peking, to strengthen the constabulary, in which many of its members enrolled themselves. Later it became merged in the Boxer organization, which became active in the latter part of 1899. The Boxers, although originally hostile to the Manchus, adopted as their tenets support of the heavenly dynasty and death to all foreigners. The leaders of the society were Chinese *litterati*, and their secret purpose may have been to bring about the downfall of the Manchu Government by embroiling it with foreign powers, as well as to wrest the leased territories from the Europeans, and render their rule impossible in the spheres of influence that they had wrung from the Empress Dowager.

The recrudescence of anti-foreign fanaticism among the country people of Shantung and Pechili and in Manchuria was caused not so much by political sentiment as by the superstitious belief that the foreign devils bring ill luck. They were suffering from the effects of a prolonged drought and with famine staring them in the face, when the Boxers told them that the celestial powers were angry because they permitted the presence of devils, and could only be appeased by the extermination of Christians, as had happened in 1870, when a massacre had brought rain; they joined the society by thousands, those who were less superstitious being moved by desperation and the prospect of plunder, and by envy of the Chris-

tian converts who were fed by the missions. In diplomatic and commercial circles the rising anti-foreign sentiment was, as on former occasions, laid to the charge of the missionaries, who were accused of interfering in local politics and in the course of justice to secure privileges and advantages for their converts, and of invoking the support of their legations when such activity brought them into conflict with the authorities or provoked the resentment of the populace. Protestant missionaries, while denying that they attempted themselves to exert undue influence or interfere in lawsuits, affirmed that the Roman Catholics were accustomed thus to intervene in local affairs. The Roman Catholics on their part reversed the accusation and exculpated themselves. There were 800 priest missionaries who had 2,000,000 converts, while Protestant missionaries of various nationalities, but chiefly English and American, and of different denominations, numbered 1,700, with 27,000 converts. The Chinese converts are generally despised by their fellow-countrymen, who say that they embrace the foreign religion for selfish and mercenary reasons.

The Boxers gained so many converts wherever they carried on their propaganda, not among the poor, the ignorant, and the disreputable alone, but among merchants, learned officials, and people of influence and standing, and especially among the Manchu nobility and military class, that the Imperial Government did not and could not treat them as members of one of the ordinary seditious and lawless secret societies. They clothed their doings with mysterious and spiritualistic rites, besides practicing boxing and fencing, and the movement had the aspect of a religious awakening. Every one looked on it as something strange and supernatural, bringing deliverance not only from foreign aggression but from the wrongs and evils incidental to Chinese officialism. The rapid growth of the sect, which gained millions of adherents in the course of a few weeks, suggested to the Governor of Shantung and to the bellicose Manchu generals the plan of utilizing the Boxers as a militia if it came to a war with the European powers. In the earlier conflicts between the Boxers and the native Christians the Government assumed an attitude of impartiality, and when the Boxers committed depredations that called for complaints from the foreign ministers the Government characterized the culprits as bad Boxers who had crept into the society by false professions. When, later, their acts threatened to provoke European intervention, they were spoken of as rebels in the diplomatic correspondence, and at the same time praised as patriots in secret edicts. When military intervention actually resulted, they were armed and organized as a militia.

The Boxer society was over a hundred years old when it took on new life and began to attract attention in the beginning of 1899. For ninety years it had been under an imperial interdiction. In 1898 trouble arose in northwestern Shantung over an old temple near Linchinchau which the Roman Catholics claimed to have bought and which they tore down in order to build a chapel on the site. The people of neighboring villages demolished the chapel and rebuilt their temple, which was in turn pulled down and the chapel was re-erected by the Government. In the summer of 1899 a difficulty arose in the vicinity of a station of the London mission in southeastern Pechili, and serious trouble was only averted by the vigorous action of the British consul at Tientsin. In the autumn of 1899 the Boxers planned a rising in northwestern Shantung, but at the request of the United States consul at Tientsin a

force of Chinese troops marched into the district and dispersed the Boxers after killing 98 of their number in a fight. On Dec. 31, 1899, the Rev. Mr. Brooks, an Englishman, was cruelly murdered in Shantung. Sir Claude MacDonald addressed a grave remonstrance and warning to the Tsung-li-Yamen. The German Government objected to Yu-Hsien, who was removed, but only to be appointed Governor of Shansi, the Tsung-li-Yamen, with Prince Tuan at its head, receiving with merit the charge of the German representative, backed up by his British and American colleagues, that he was responsible for the disturbances in Shantung. Yuan-Shih-Kai was appointed Governor of Shantung, and he began to put down the Boxers, giving his brother charge of his troops, which are the best disciplined soldiery in China. The brother was immediately recalled, and the new governor was made to understand that he would be held answerable for any popular disturbance resulting from his action against the Boxers.

The burning of a Christian congregation in its chapel and the cruel murder of two native preachers occurred in January, 1900. The pillage of converts and the exaction of fines for the support of the Boxers were matters of daily occurrence. Two of the murderers of Mr. Brooks were beheaded and some of the officials were punished, but the British Government declared the settlement unsatisfactory in that no punishment was inflicted on Yu-Hsien. The British minister, on Jan. 11, warned the Tsung-li-Yamen that whether the negotiations took a friendly course or the reverse would depend on the manner in which the local authorities carried out the imperial edict enjoining strong measures. On the same day another edict was issued which seemed to encourage the Boxers, and in view of its equivocal language identical notes were addressed to the Tsung-li-Yamen on Jan. 27 by the American, British, French, German, and Italian ministers pressing for the promulgation of an imperial decree condemning by name and abolishing the I-Ho-Chuan and Ta-Tao-Hwei societies. The answer received on Feb. 25 was so unsatisfactory that the ministers demanded a joint audience of the Tsung-li-Yamen. A decree denouncing the I-Ho-Chuan was issued, but its failure to produce the desired effect was attributed to the honors and promotion bestowed on the late Governor of Shantung, whom the foreign representatives regarded as the chief instigator of the anti-Christian movement. At every new outbreak of lawlessness fresh proclamations were issued, some of them ex-cusing or encouraging the Boxers and their patriotic spirit while condemning their excesses. Soldiers were posted at various points, many of them being members of the Boxer society and all except troops brought from Tientsin sympathizing with its objects. These foreign-drilled troops dispersed various bands and killed numbers of their members, but the scattered bands reassembled in a safer place. Proclamations that were issued threatening punishment if the Boxers did not disband within a certain time were neutralized by secret edicts representing them as Chinese patriots who wished to organize a local militia to help their country in its difficulties. The society, which was originally founded by Taoist priests, practiced peculiar rites and incantations, and its members claimed to be invulnerable to bullet or sword. They made no effort to procure rifles, but were armed only with swords, pikes, and three-pronged forks. Their claim to invulnerability against all kinds of weapons was believed implicitly by themselves even when they saw men in their ranks

falling in numbers. The chiefs of the Manchu party believed it also, or affected to believe it; and when one of the Chinese ministers told the Empress that he had seen heaps of slain Boxers, she said that they must have been robbers who had joined the bands under false pretenses. Tung-Fuhsiang, honored as the only victorious Chinese general, ever since he arrived with his fierce, undisciplined Mohammedan troops from Kansu two years before after suppressing the rebellion in Mongolia, had been eager to engage in a war with all Europe. Prince Tuan also, who had passed much of his life at Mukden, was persuaded that the regular Chinese army, aided by the invincible Boxers as irregulars, would prove strong enough to drive out any force that the outer barbarians were likely to send to China.

The Boxer movement had spread from Shantung into Pechili and Manchuria and invaded Tientsin and Peking before the Boxers began openly to drill and to threaten the Christian communities. They established their headquarters at Paotung-Fu, 80 miles south of Peking. Before the end of May this district was filled with Boxer camps, and the movement spread toward Peking. In Chochau were many thousands of Boxers, who ate up all the food in the district, and compelled the Taotai to stamp with his official seal their orders and proclamations. Attacks were made on the small scattered communities, especially upon native Christians. These began to flock to the missions for protection. Some of the American missionaries made formal charges against the society and accused several of the provincial officials of upholding it. Yu-Hsien, Governor of Shantung, in a secret memorial advocated the society as a useful agent in driving out foreigners and preserving Shantung for the Chinese. The Empress Dowager, in a number of edicts, while condemning secret societies in general, made an exception of this patriotic organization, whose watchword was to uphold the dynasty and exterminate or expel the foreigners. Its members were declared to be peacefully practicing athletics and learning gymnastics for self-defense and to protect their villages and homes.

On May 28 some bands which set out from Tungechau destroyed the railroad station at Yeng-Tai, close to the capital, where the Tientsin and Peking and the Lu-Han Railroads have their junction. The track was torn up for many miles, and the machine shops and locomotives were destroyed. After the attacks on Catholic missions near Paotung-Fu, on May 17, Bishop Favier, in Peking, warned the French minister that Peking was surrounded by Boxers, who were planning to attack the legations; that they were numerous within the city, and were compelling Catholic converts to take refuge in the mission compounds; that the Boxers were approaching from the east as well as the south, and only delayed their progress in order to exterminate all Christians on the way. The bishop fortified the Peitang cathedral, bought supplies, rifles, and ammunition, and in the end obtained guards for which he petitioned—32 French and 10 Italian marines. The Belgian and other engineers at Chang-Hsin-Tien, on the Lu-Han Railroad, were rescued with their families by a party of civilians from Peking. A large number of engineers, mostly Belgians, endeavored to escape from Pao-Ting-Fu by boat to Tientsin with a Chinese escort, which betrayed them to the Boxers. The party, after losing the boat, divided into two companies. One company tried to return, but went astray, and the survivors finally reached Cheng-Ting-Fu, where they helped the bishop, priests, and nuns to defend the mission station against repeated attacks. The other com-

pany marched overland to Tientsin, suffering great hardships, and was at last escorted into the foreign settlement by a strong rescue party. An earlier attempt at relief had failed, the party, escorted by 30 Russian soldiers, having returned with the two officers and several men wounded. Three American missionaries at Kalgan made their perilous way across Mongolia to Kiachta and thence to Europe by the Siberian Railroad. Other missionaries who attended a convention at Tungchau, having been warned by the Taotai that the soldiers he had obtained to protect them were untrustworthy, were brought away by a party of armed missionaries from Pekin. After the departure of the missionaries the college and mission buildings and the imperial post office at Tungchau were wrecked. The Taotai became the virtual prisoner of the Boxers, who compelled him, like the Chochau magistrate, to sign decrees at their dictation.

When the Boxers at Chochau were making preparations to march on Pekin the Chinese party at court obtained a majority in the Grand Council in favor of sending Gen. Nieh with his troops to suppress them. Yung-Lu, however, induced the Empress to commission two mandarins of high rank to precede Nieh and secretly reassure the Boxer leaders, and when Nieh dispersed some bands and killed 500 Boxers he was recalled and reprimanded.

Unsuccessful Relief Expedition.—Foreign war ships began to assemble at Taku only a day or two before the legation guards were sent up to Pekin at the request of the ministers. A score of ships were anchored there when the request came on June 9 from the British and American ministers for more guards, as the situation was most serious. The naval commanders had been instructed at the beginning of the month to consult as to any concerted action that might become necessary, the ministers having urged their respective governments to give their officers such discretion at the suggestion of M. Pichon. A considerable force of marines of the various nationalities had been landed and taken up to Tientsin when the call for additional guards was made. The commanders and consuls held a conference in regard to the message, and the French consul agreed with his Russian colleague that the information was not sufficient to justify an act amounting to forcible intervention without orders from their governments. Capt. McCalla said: "My minister is in danger and asks for help. I am going." Admiral Seymour agreed with this decision, and the other commanders, being unwilling to leave the initiative to Great Britain and the United States, decided to take part in the expedition. The Chinese authorities, after first refusing, consented to furnish railroad transport.

Marines and seamen were landed from the ships the next morning, others were detached from the force already at Tientsin, and the expedition set out in four trains, the last one, holding the French and Russians, being delayed till the following day. The mixed force was composed of 915 British, 350 Germans, 104 Americans, 300 Russians, 158 French, 54 Japanese, 40 Italians, and 25 Austrians; total, 1,846 men. The British had 3 9-pounder muzzle-loaders, 3 Maxims, 3 Nordenfeldts, and, mounted on a truck in front of the first train, a 6-pounder Hotchkiss quick firer; the Americans had a 3-inch fieldpiece and a Colt automatic gun; the Russians a field gun, the Italians a machine gun, and the Germans 2 machine guns. The trains passed through Peitsang and Yangtsun without misadventure and reached Lofa the same afternoon, having been detained

only by a small break, which was quickly repaired, but the stations had been burned by Boxers. At Lofa the track was badly torn up, and the forenoon of June 11 was spent in mending it. The work of repairing was done by sailors, mostly British, German, and American, with the assistance of coolies that the Japanese and British had brought from Japan. The commanding officers, after conferring, announced that the purposes of the expedition were to reopen railroad communications with Pekin and thus insure the safety of their legations and national interests in that city, and to assist the Chinese Government to restore peace and order. Admiral Seymour commanded in chief, and on each train the senior officer was in command. Beyond Lofa working parties repaired the tracks ahead, making slow progress because the rails were torn up and often twisted. Only two or three miles had been repaired when a large body of Boxers advanced boldly to attack the troops. After misunderstanding of orders and much confusion the men were formed in line as the Boxers, who themselves had stopped to go through a fantastic ritual, rushed forward, brandishing their swords and spears, but they were checked before coming into close quarters by a fusillade that killed 35 and put the rest to flight. Beyond Lang-Fang the troops were attacked by another body of Boxers who had torn up the tracks at that point just before. Again there was confusion among the commands of the different nations. The Boxers rushed rashly up to the bayonets, and were not driven off until a Maxim gun was brought into action; yet they did not hurt a single man, although they left 102 dead on the ground. The guard attached to the construction train killed 25 in another fight. No loss was sustained by the allies until 5 Italian pickets were killed on June 14 while guarding Lang-Fang station. The Boxers, 600 strong, advanced on the station up to within 25 yards of the line of British tars, braving the volleys of the latter and the fire of a German Maxim, which killed a quarter of their number before they retreated. The roadbed beyond was destroyed, and the expedition gave up hope of reaching Pekin by the railroad, but planned, if Anting could be made, to dash through by a forced march. On the same day 1,500 Boxers attacked the guard left at Lofa station, and were driven off by the aid of re-enforcements that were sent back, losing over 100 and wounding 2 men with missiles from an old cannon. Other large bodies of Boxers were seen in the rear, and these tore up the track, destroying communications with Tientsin. Ahead the railroad was completely wrecked. On June 18 the troops at Lang-Fang were attacked by a force of 5,000, in which were many imperial troops and a large body of cavalry. These were the mutinous Mohammedan soldiers of Tung-Fuhsiang's army, who had left Pekin to check the advance of Admiral Seymour's expedition. The troops formed in line, consisting of Germans, Russians, British, and Japanese, commanded by Capt. von Usedom, a German. They advanced in skirmishing order and quickly scattered the Boxers who came in the first line and charged with their usual futile courage. Behind them were the Chinese soldiers, who delivered a heavy fire from magazine rifles. They also were stopped, but renewed the attack when the Europeans started back for the train. The Germans faced about quickly and, taking a position in advance of the others, got a cross fire on the Chinese which forced them to retreat hastily, leaving many banners and over 400 slain, while the losses of the allies were 7 killed and 48 wounded. After

this fight the allies concentrated at Yangtsun, where the decision was taken to retreat, abandoning the trains because the line was cut probably beyond repair, and camps of Chinese troops as well as Boxers had been seen between Yangtsun and Pekin.

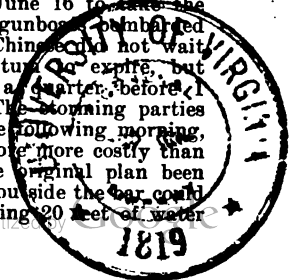
They started on June 19 to march down the Peiho, placing the wounded and stores on four junks that had been seized by a German reconnoitering party. The march was exceedingly slow on account of the difficulty of managing the junks in the eddies of the river. On the second day the Americans at the head of the column encountered Boxers and drove them away with a cannon. After that every village wall, every clump of trees, and every ditch gave cover to the enemy, who contested the whole way with rifles and cannon. When the Chinese appeared in the open they were easily scattered by fire from machine guns. The villages were cleared by bayonet charges. They were scarcely half a mile apart, and at every one there was a fight, while in the intervening spaces the men were constantly exposed to the fire of the Chinese, who were armed with Mannlichers, using smokeless powder, and had a small gun, fired with smokeless powder also. Peitsang was taken from a garrison of Chinese troops after a stubborn battle. Below that place they had to fight Chinese regulars having field guns and cavalry. Capt. McCalla and Cadet Tausig were wounded. They turned a village from which the enemy could not be dislodged, and on July 22 approached the old city of Tientsin, having seized three more junks, on which they put their heavier guns as well as the wounded. They attempted a night march, but were checked by a heavy fire. The junk with the guns on board sank. In the morning they came opposite a walled inclosure on the other bank and were hailed by soldiers of the viceroy, who were told that the troops were going to Tientsin and had no trouble with anybody but Boxers. To the surprise of the allies, the Chinese opened fire with rifles and guns all along the wall. They knew nothing of the capture of the Taku forts by the fleet. All the force sought cover and returned the fire. The Frenchmen on their junk stopped close to the wall and began firing on the Chinese, while a party of British and one of Americans and Germans crossed the river above and below and stormed the low wall at different points. The British entered first and turned on the Chinese one of their own guns, causing them to run in surprise and consternation. The Germans and Americans took two other guns and turned them on the garrison, and soon the place was abandoned by its defenders. It was the great Haiku arsenal, with a garrison of about 500 men, who were not more surprised by the attack than the captors were when they found, besides 7 guns mounted on the walls, 60 odd stored in the buildings, all of the most modern design, and Mannlicher rifles by the thousand, with millions of rounds of ammunition. The Chinese, with 5,000 native troops, had field guns, seconded by guns of position in Tientsin. The expeditionary force therefore determined to remain there, and brought over the troops left on the other side of the river and the wounded from the junks. Large guns were mounted at every corner, with smaller rifles and machine guns along the walls. By rocket signals they found that the Europeans still held Tientsin, and they were confident of being able to hold out with their superior artillery against the incessant attacks of the Chinese until relief came. On June 25 came a relief column of Russian troops, and on the following morning they marched unopposed down to Tien-

tain after destroying guns and war stores in the arsenal worth 40,000,000 taels. The expedition had lost more than 60 killed and 200 wounded.

Reduction of the Taku Forts.—As soon as the extra guards under Admiral Seymour set out from Tientsin, Yansu soldiery marched from Pekin to oppose them and cut the railroad, and large bodies of Boxers congregated at points along the line. On June 6, when the railroad between Admiral Seymour's party and Tientsin was cut, the American, British, French, German, Austrian, Italian, and Japanese admirals held a council of war for the purpose of arranging combined action if required. There were 25 ships in the harbor and 900 men on shore. Each government intrusted its naval commander with discretion to decide, in consultation with the other commanders, what action was required by the necessities of the case for the protection of its legations and citizens. The Boxers and troops that cut the railroad in the rear of Admiral Seymour immediately invested Tientsin. Until then the officers at Tientsin did not know definitely that the relief force was cut off, and after that they knew no more about Admiral Seymour until they saw the rockets sent up from the Chinese arsenal. When Seymour's expedition started, the Government at Pekin gave orders to the Viceroy of Pechili to resist by force the landing of any more troops. Gen. Liu had been sent to garrison the Taku forts with about 3,000 well-trained soldiers from Hunan when the additional guards started for Pekin against the protest of the Chinese Government. The works at the mouth of the Peiho, partly of modern and partly of older construction, mounted 200 guns, half or more of them of modern patterns.

On receiving information that the Chinese were re-enforcing Taku and were sending troops to attack Tientsin and occupy Tangku and preparing to mine the mouth of the Peiho, the admirals determined to seize Taku. They first held a naval council on board the Russian flagship on June 15, and resolved to land 300 Japanese marines to guard the railroad station at Tangku, but not to assume the offensive unless the 2,000 Chinese reported to be coming should advance to seize the station. On June 16 they resolved at another council that although the Chinese Government, when the Boxer disturbances began, had seemed sensible of its duty and anxious to restore peace, its troops were now engaged in laying torpedoes in the Peiho and advancing against the railroad, and were plainly co-operating with the insurgents; therefore, since the responsibility of preserving communication with the land forces devolved upon the naval commanders, it became necessary to occupy temporarily the Taku forts, with or without the consent of the Chinese authorities. This intention was conveyed to the Viceroy of Pechili and the officer commanding the forts, who were notified that unless these were evacuated hostilities would begin at two o'clock in the morning of June 18.

The admirals designed a combined attack on the forts by land and water, and for this purpose 1,200 men were landed on June 16 to take the forts in the rear while the gunboats bombarded them from the river. The Chinese did not wait for the time of the ultimatum to expire, but opened fire on the vessels a quarter before 1 in the night of June 17. The storming parties came into action only on the following morning, and the operation was therefore more costly than it would have been had the original plan been carried out. The large ships outside the bar could not assist, as no vessel drawing 20 feet of water



can get within 10 miles of the forts. The Russian Capt. Dubrowolski, as senior officer, was in command of the allied fleet of gunboats. On June 17 Japanese and British sailors and Russian infantry took possession of the railroad station of Tongku and wharves 2 miles from the forts. In the river above the forts the gunboats and destroyers took their stations—the Russian Bohr, Koreetz, and Gilyak, the French Lion, the German Itlis, and the British Algerine, Whiting, and Fame. The American Monocacy was there also, and was utilized as a hospital ship. Outside, 10 miles off the forts, lay the British Centurion, Barfleur, Orlando, Aurora, and Endymion, the French D'Entrecasteaux, Jean Bart, Descartes, Pascal, and Surprise, the Russian Sissoi Veliky, Rossia, Demitri Donskoi, Makhimoff, Sivoutch, and Gremiaschky, the Italian Elba and Calabria, the German Hansa, Hertha, Gefion, and Kaiserin Augusta, the Japanese Yoshimo-Kan and Marko-Kan, the Austrian Zenta, and the American Newark. The Chinese Hai-Tien and Hai-Chu were there, and when notified of the intended action the admiral agreed to put out his fires. The Monocacy had been ordered to observe a strict neutrality, and took no part in the affair. The Atago, besides sending landing parties ashore, was likewise inactive. An armored train with a searchlight, manned by 100 men, was sent off for Tientsin when night set in.

The engagement was begun after midnight by one of the Chinese forts firing on the Algerine, a third of a mile distant, which replied directly, and was promptly supported by the Russian gunboats moored in line a quarter of a mile beyond. The Itlis, which had cleared for action days before and was the only vessel in perfect fighting trim, sent in a few shells, and the Lion also. Most of the forts took up the fire. The Itlis left her moorings, and with all lights out steamed down the river to the aid of the British and Russian vessels. As soon as anchor could be lifted the Lion followed. The six gunboats were then under fire of all the forts at ranges averaging a mile, and working all their guns. With the machine guns in their tops they made it impossible for the Chinese to serve the new Krupp quick firers mounted in cavaliers over the high redoubts, but the guns in the angles and the parapets could not be seen, for the night was very dark. The Gilyak, moving close to Taku village, lost many men by rifle fire. When the battle began the British destroyers Fame and Whiting steamed up the river to the naval dockyard and captured the first-class 32-knot German-built destroyers Hai-Lung, Hai-Nui, Hai-Ching, and Hai-Hoba. They were fully manned with Chinese crews, who jumped upon the wharf and ran without striking a blow or firing a shot. During the night the six gunboats, although their shells were well placed, could do no more than hold in check the fire from the forts, which was, however, ineffective. Many of their guns had to be fired with extreme depression from the high redoubts. The powder charges were too light to carry the projectile to its mark, or sometimes they were excessive. There were no well-trained gunners among them. Yet with all these disadvantages they might have won the battle by their valorous persistency if their shells had not been worthless, most of them having either no bursters, or fuses so defective that they failed to explode. If only a part of the shells had burst the six gunboats could not have stood up under the fire of two miles of fortifications for six hours. When daylight broke, the Chinese poured in a much more vigorous fire, and the gunboats got under way on the flood tide—all

except the Gilyak, which received a heavy projectile on the water line. Steaming closer to the forts and moving about rapidly to whatever point invited attack, or passing up and down to deliver their broadsides, the ships worked all their guns with desperate energy. The Itlis had to be beached, a heavy shot having pierced a boiler. An explosion of a magazine in the largest fort checked the Chinese fire for a time, but soon it was renewed more fiercely than before. The storming parties had reached the forts on the north bank of the river, the Russians from one side, the Japanese from the other. Yet it appeared that the attack had failed. The heavy guns of the south fort were brought to bear on the gunboats, and when the storm of projectiles, which exploded now better than before, was becoming too severe for the ships to live in, the main magazine of the fort blew up, sending a blast of fire, smoke, and *débris* a thousand feet into the air. The concussion was so terrible that forts and ships ceased firing, and as cheers arose from the allies the Chinese fire was renewed with little vigor, gradually slackened, and finally ceased. When the storming parties entered the north forts the garrison made no resistance, but was leaving as fast as possible, and when the south fort was reached, Chinese soldiers were seen fleeing across the plain. Many prisoners were taken, and employed in removing the dead, nearly one third of the garrison having been killed or wounded. The guns were in good order, and some of them had never been fired. The storming parties, consisting of 200 Russians in the van, 250 English and 130 Germans forming the main body, and 300 Japanese in the rear, had to advance 2 miles along a narrow road. The Russians were checked by a heavy fire, and the British and Germans marching through paddy fields made little progress in the mud. The Japanese, more accustomed to such ground, found a better path and passed the others on the double quick, entered the north fort first, and drove the Chinese out at the point of the bayonet. Their captain was killed outside the walls, and their losses were 5 killed and 4 wounded; the Russians, 18 killed and 39 wounded. In the river the Itlis was struck 8 times, the Gilyak received 4 shells, the Koreetz 4 and took fire, the Lion was struck once, and the Algerine once. There were killed in the naval action 18 Russians, 10 Japanese, 7 Germans, 1 Englishman, and 1 Frenchman. About 100 wounded were conveyed to Japan for treatment. The allied naval commanders issued a proclamation from Chifu stating that the powers were not making war on the Chinese people, their only object being to rescue their countrymen and to suppress the Boxers.

The Taking of Tientsin.—The Boxers and Kansu troops that destroyed the railroad and cut off Admiral Seymour's column proceeded to invest the European settlements at Tientsin, which were defended by about 3,000 men, with few machine or other guns and a short supply of ammunition. The besiegers had modern artillery, and after the fall of Taku the guns in the forts and troops of the Pekin field force joined in the attack. Three hours after the capture of the Taku forts a determined attack was begun, which was kept up day after day, burning most of the European buildings and compelling the garrison and residents to retire to the British settlement. The Russian troops endeavored to hold the railroad station across the river, but withdrew on June 19, having lost 7 officers and 150 men and shot away nearly all their ammunition. Relief could not be brought from Taku because the railroad

was cut on June 15. A force of 400 Russians and 150 American marines with 3 field guns attempted to break through on June 20, and were driven back. On June 20 a relief force of 1,500 Russian soldiers and 380 British, 240 German, 100 Japanese, and 50 Italian marines started in armored trains, with an abundance of artillery, followed by 750 German troops. This force raised the siege on June 23, after silencing the field guns of the Chinese and the guns of the forts in the old city. In the night of June 25 a detachment of 2,000 Russian and other troops relieved Admiral Seymour in the Chinese armory and brought his force and 200 wounded safely away. The railroad was then opened, and troops were landed at Taku and taken up to Tientsin. As the allies made no further move, the Chinese were encouraged to take the offensive again. As soon as the allies advanced on Tientsin regular Chinese troops from Peking and other ports were ordered to oppose them. Gen. Nieh with 10,000 Chinese regulars arrived on July 4 and occupied the arsenals and

southwest to the northeast, taking in the arsenal as the final objective. Gen. Fukushima, commanding the Japanese, suggested the plan and conducted the operation. With 1,000 infantry, 150 cavalry, and 2 mountain batteries, on July 9 he made a wide sweep, with the British in line on the right, under Gen. Dorward, consisting of the Welsh Fusileers, a regiment of Chinese trained at Wei-Hai-Wei, a Hong-Kong regiment, and a naval brigade under Admiral Seymour, and at the pivotal point of the turning movement a force of Japanese blue jackets and 100 United States marines under Major Waller, whose duty it was, when Gen. Fukushima approached the arsenal from the left, to advance under cover of the mud wall, the whole of the forces converging on the arsenal. Gen. Fukushima's infantry charge, prepared by the British artillery and carried out under cover of his own guns, was a marvel to the military men of other nations. When the Japanese soldiers came into the fire zone they broke into a brisk run and kept it up for 2,000 yards. The



THE FRENCH QUARTER IN TIENTSIN, RUINED BY THE BOXERS.

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forts in Tientsin. Extending their lines so as to partly inclose the settlements, the Chinese planted guns in close proximity to the lines of the allies and held the large European force practically in a state of siege. On July 6 the English and French settlements were shelled with fieldpieces concealed in the suburbs of the Chinese city. Outpost fighting was constant, and the rifle and gun practice of the Chinese continually improved. The railroad station was all the time under fire, and along the whole line the Chinese attacked nightly. Shells exploded in the buildings used as barracks with increasing frequency. The investing line was extended until it formed a crescent six miles in length. The battery of British naval 12-pounders was shelled from front, rear, and side, and this cross fire and the bombardment from a fort and several field batteries caused many casualties in the settlements. The military commanders decided to clear the flank and rear of their principal battery, when its position became precarious, by a wide flanking movement from the

Chinese, as soon as they saw the Japanese coming, stopped firing and retreated helter-skelter. The rest of the line then advanced so as to encircle the Chinese works. All the Chinese disappeared, leaving 4 guns and many banners, except 500 Boxers, who were found in a village and nearly exterminated by the Japanese infantry and cavalry. The arsenal was deserted when the Japanese and American storming party scaled the wall.

In the afternoon the settlement was hotly shelled from the city, but on the following day the Chinese even refrained from attacking the outposts. The portion of Gen. Nieh's command with whom the battle had been fought was reported to be retreating, about 3,000 in number, and the rest of these trained Chinese soldiers to be quarreling with the Boxers, who alone made a vigorous bayonet attack on the railroad station on July 11, and were only repelled after three hours of sharp fighting, in which the Japanese lost 80 men, the French 60, and the British 18. The troops were on the spot, because a general attack on the Chi-

nese position was planned for the same day. The plan was that of the Russian Gen. Stoessel, who undertook to cross the Lutai Canal on a pontoon bridge and capture the batteries on the north bank, after which his force was to attack the Chinese camp and afterward the fort, while the rest of the allied forces made an attack on the south wall of the city and the neighboring suburbs. The operation was not carried out until July 13, when with the newly mounted British naval guns the European artillery, numbering 42 guns, for the first time overmatched the Chinese. A reinforcement of 1,200 Americans arrived on July 12, bringing the international force up to 10,000, including 1,200 Japanese. The Russians advanced early the next morning on the right with 3,100 soldiers and 400 French and German marines, to capture the batteries on the Lutai Canal and clear the camps, while under cover of the naval battery on the west 2,000 Japanese, under Gen. Fukushima, and 850 French, 800 Americans, 800 British, and 50 Austrians under command of Gen. Dorward, attacked the city by another wide flanking movement. The Russians were successful after a hard day's fight. They captured the batteries and destroyed the camps, losing 150 men, and returned in the evening, leaving a force to attack the forts at dawn. The attack on the city was begun by a heavy bombardment from the two English naval batteries, which landed their shells so well that a powder magazine exploded at the beginning of the battle, and the Chinese fire, which was spirited at first, soon grew slack. A terrific explosion of brown prismatic powder occurred soon after the infantry began to advance. The turning movement was made in long lines, the Japanese advancing under cover of the mud wall to the south gate, the other troops following in three lines, the plan being to take the city by working round the walls. As the Japanese led the attack in the center, the Ninth American Regiment, supporting them on the left, was taken over to their center when it was seen that they urgently needed help there, and was caught in a furious rifle fire. Col. Liscum was killed while directing his men to cover. The French also went to the support of the Japanese and lost heavily. The Japanese were brought to a stop by the heavy fire from the walls, and made only slight and intermittent progress beyond the mud wall, from which the artillery of the allies at times caused a momentary pause in the Chinese fire. The Japanese hung on to every foot they gained, although their losses were enormous. Those of the British, resting under cover, were slight excepting among detachments of sailors and marines that were sent to support the Americans and to strengthen the Japanese right. The shell fire of the allies produced considerable effect, yet evening came before the Japanese could reach the gate to blow it up. The Chinese had destroyed the bridge over the moat. Gen. Fukushima determined to hold his position through the night, to throw a bridge over under cover of darkness, and to resume the attack early in the morning unless the Chinese, as his experience taught him they might, should evacuate their positions during the night. This most of them did, and when the Japanese crossed the moat, blew up the entrance to the bastion, and scaled the walls with remarkable quickness and skill before it was light in the morning of July 14, they met with but little opposition. The French, British, and Americans followed. The Chinese troops retreated toward Peking. The losses of the allies in the battle were 775 men among 8,000 troops engaged. The city was divided into four sections, and these were placed respec-

tively under British, Japanese, French, and American jurisdiction. The guards were of little use, except the Japanese. Arson and the butchery of noncombatants began at once, and the object was the looting of this rich commercial city, in which European soldiers and officers vied with the Chinese rabble. The Yangtse viceroys appealed to foreign powers to save Tientsin from destruction, as it would take a hundred years to restore it, and the effect would be disastrous to foreign as well as to Chinese commerce, saying that the foreign ministers in Peking were protected, and that Li-Hung-Chang had been transferred to north China as Viceroy of Pechili.

After the capture of Tientsin the generals decided that, in view of the large forces that the Chinese Government had assembled to contest the route and of the difficulty of moving troops and transporting supplies in the rainy season, they could not safely advance to the relief of the legations until their forces were much strengthened and the organization of transport more complete.

Capture of Peking.—The march from Tientsin to Peking began on the afternoon of Aug. 4. There were 22,000 men in the relief column when it started. Of these, 12,000 were Japanese, forming 11 battalions, 3 field and 3 mountain batteries of 6 guns each, and 3 squadrons of cavalry. They were organized in two brigades, one under Gen. Yamaguchi and one under Gen. Fukushima. The chief command of the international forces devolved upon the Russian Gen. Linevich as senior officer. The British contingent consisted of a battalion of Welsh Fusiliers, a Sikh and a Rajput regiment, a regiment of Punjabi infantry, one of Bengal lancers, and a naval brigade of sailors and marines, with a battery of 4 12-pounder naval guns, 1 of 15-pounders of the royal artillery, and 1 of muzzle-loading 7-pounder screw guns belonging to the Asiatic artillery, the total force numbering 2,800. The Americans, under Gen. Chaffee, numbered 2,400 men of the Ninth and Fourteenth Infantry and the Sixth Cavalry, marines, and a field battery and a number of Colt automatic and Gatling guns. The Russians had 3 battalions of 1,000 men each, with 4 field batteries of 8 guns each, some Maxim guns, and a sotnia of Cossacks. The French had a force of 800 men, Anamese and Europeans, ready to start, with a battery of old field guns. The Austrians, Italians, and Germans were not in sufficient force to join the column.

During the preliminary reconnaissances Capt. de Marolles, with a party of French marines, embraced a chance to seize the Hsiku arsenal, which his men held in spite of the determined efforts of the Chinese to recapture the position. When the general movement began the Japanese had the advance on the west side of the river, supported by the British and Americans. The Russians and French, 4,000 strong, took the east bank between the river and the railroad, beyond which the Chinese had flooded the country to prevent a flanking movement. Reconnaissances had shown a long line of intrenchments at Hsiku, which were believed to be held by about 30,000 men. At daylight on Aug. 5 the Japanese cavalry made a brilliant charge into a battery on the extreme right of the Chinese line and cut down the gunners before they recovered from their surprise, though not without severe loss. This capture equalized the artillery forces. Under cover of a heavy fire from the British naval 12-pounders which checked the Chinese fire of shrapnel, the Japanese infantry, without waiting for the British and Americans to come up, extended their line, advanced close to the Chinese intrenchments, and

charged on the double quick through a rain of bullets, not once faltering in spite of prodigious losses. Before they reached the trenches the Chinese fled. The main trenches, partly enfiladed by the British artillery, were evacuated when the whole line advanced, the Chinese artillery having already retired and the infantry only waiting to empty their magazine guns at long range. They evacuated the left bank also without coming into action with the Russians and French, and deserted the town of Peitang. The Russians and French precipitated their withdrawal by sending a column beyond Peitang, threatening the line of retreat. The impetuous assault on the first line of trenches cost the Japanese 300 men, but it had the effect of demoralizing the Chinese, who believed after that that with repeating rifles behind the best intrenchments they could not stop a rapid infantry charge. From that time they would not await a Japanese attack on their trenches. Before other troops they stood their ground better. They retreated from Peitang to the much stronger position that they had prepared at Yangtun. It was the suggestion of Gen. Yamaguchi that the allies should follow up their initial victory by continuing to pound the Chinese until they became completely demoralized. Accordingly, the allies advanced on Yangtun the next day. There the Boxers and imperial troops were found in greater force and in a more extended position. The Americans and British began the fight with artillery preparation, and when the Chinese right retired the infantry advanced in the center. The Indian troops began to waver as the shell and small-arms fire from the railroad embankment became hot, but the Fourteenth Americans, under Col. Daggett, dashed onward with a yell and carried the embankment, where for a time they suffered from the fire of the English artillery in the rear as much as from that of the Chinese intrenchments ahead. The casualties of the Fourteenth were 10 men killed and 55 wounded, 10 of them by British shells. Gen. Chaffee with the rest of the Americans cleared the villages on the right, coming under a severe cross fire at one point, and the Russians advanced cautiously through the already deserted villages on the left, and after a stubborn fight made themselves masters of the bridges and railroad station, losing 118 men. The Chinese had several lines of excellent intrenchments, but most of them were undefended. The Japanese, who were in the rear, brought up their batteries in time to join the Americans in shelling the retreating columns. The fighting lasted six hours, in the midst of tall corn that shut off the view in front, and in an atmosphere so stifling that, while the casualties of the Americans were 74, more than 1,000 men dropped from exhaustion. Of the British, 45 fell in the battle. The Chinese, screened by the broom corn and evading a close fight, got away with slight losses.

The Chinese had been so well beaten at Tientsin, and chased away so easily from Peitang and Yangtun, that the generals formed a new estimate of their strength, supposed to have been 45,000, and of their power of resistance. At a council of war the Japanese generals proposed not to wait for 7,000 additional British troops that were expected, besides American re-enforcements, nor for their own complement of supplies and transport, but to push on with the whole force, instead of leaving one of their two brigades at Yangtun to guard communications, although they had provisions for less than five days and train for only a single brigade. By chasing the Chinese without giving them a chance to recover breath or courage they counted on rolling them up to the gates of

Pekin without another battle. The other generals concurred. On Aug. 8 the Japanese set out before daylight, the other troops some hours later, and the next two days it was the same. Before they had marched an hour they came up with the Chinese, and they harried their rear for the rest of the day. Fresh troops went forward each morning to form the advance guard of the day. Although the Americans had thrown away their blankets, ponchos, and other incumbrances, and the British had pack trains, none of the other troops could keep up with the Japanese, whose burden in light marching order was still the heaviest. They reached Hosiwu on Aug. 9, just in time to prevent the Chinese, who were working on a huge trench, from flooding the fields and roads and putting an end to boat transportation on the river above. The long marches in the hot sun were trying to all nationalities, but most so to the Americans, who were debilitated by their campaign in the Philippines, and least so to the Japanese, who rested in the middle of the day.

At Hosiwu the Chinese left behind a powder magazine. They made no determined stand in the fortified towns of Matou and Changkiawan, though their losses in the latter place were 500 men, most of them killed while trying to get away. At Huohsien they intended to give battle, having collected their Manchu troops, but these also were demoralized by the defeats they had suffered and took flight when the Japanese and European troops appeared.

Before Tungchau, on Aug. 11, the vanguard came in contact with some of Tung-Fuhsiang's troops, and preparations were made to assault the town in the morning, but in the night the Chinese evacuated it and fell back on Pekin. The total number of the allied forces between Taku and Pekin was at this time 39,000 men, with 120 guns, the Japanese and Russians making three fourths of the total. The troops mobilized by the powers would double this strength in a month's time. The generals no longer hoped to enter Pekin without a stiff battle. However, they were determined to make the assault with the forces they had at the front, knowing not only the preparations the Chinese had made for defense, but the extremity to which the legationists were reduced.

The commanding officers held a council of war at Tungchau on Aug. 12, and agreed upon a plan providing for a reconnoissance in force on four roads leading to Pekin on the following day. Each force was to go into camp 7 miles from Tungchau and 5 miles from Pekin and establish contact with the other forces, and on Aug. 14, when all the forces had been concentrated on the line of these camps, to make reconnoissances around the city, perhaps encircling the walls, as it was expected that there would be a hard battle to force an entrance. The general attack was planned to begin at daybreak on Aug. 15, and to be directed against the gates of the east wall. The camps were established at the places designated. The Russians pushed their reconnoissance in force up to the wall of the city, and, encountering no opposition, Major-Gen. Vasselievski decided to force the Tungpien gate that night. The cannonade that the Chinese in the city had begun upon the legations determined him to act quickly and impelled the other generals to push their forces forward. He succeeded in blowing in the gate, which was feebly defended, and when he entered with his small force he concluded that the way was free to the Tartar city and the legations, and therefore advanced in column. The Chinese were waiting on the wall near the gate, and as soon as the Russians emerged into the street they opened a

terrific fire at short range. The Russians retreated under cover of an embankment, having lost 26 killed and 100 wounded, and in the morning the Chinese reoccupied the gate in strong force. The Japanese, whose task it was to assault the great Chihua gate, developed their attack as speedily as possible when they received word that the Russians had entered the city during the night, although only a part of their artillery and infantry was on the ground. The Americans were notified by the Japanese of the premature and presumably successful assault of the Russians. Gen. Chaffee had all his men at the front, while the British had yet to march from Tungchau. A troop of American cavalry went out early in the morning to reconnoiter the road, and when within three miles of the city they came in touch with a superior force of the enemy. The troop dismounted and took position on a bank, and while they were returning the fire another lively fire was started in their rear, upon which they quickly retreated. This cross fire, it turned out, came from the Russians, who suffered more from the Chinese fire than the Americans, and answered it, thinking it was meant for them and unaware of a force of the allies on the intermediate ground. The missionary who acted as guide for the scouting party did not stop till he reached camp and told Gen. Chaffee that the reconnoitering force was cut off. Upon hearing this the commander ordered a general advance, and while it was still early morning the Americans were marching rapidly toward Peking. On the way Gen. Chaffee learned of the Russian night assault, and when he approached the city he found the Russians in hot action against the gate they said they had taken, the point where it was planned that the American force should enter also. The Americans were ordered at once into action. Col. Daggett led a scaling party by a sunken road up to the wall, crossing a moat that was raked by musketry fire directed against the Russians. The two companies of infantry climbed the wall with difficulty and planted the American flag, but not until the Russians had forced the gate and hoisted their flag over it. More American infantry entered by the gate, where the Russians were resting, being thoroughly exhausted. The Americans halted also, and their battery shelled the walls where Chinese still showed themselves. The British, who developed their attack on the southernmost gate while the other forces were well engaged and had the American battery to assist them, had not much difficulty in entering not long after the Russians. The Japanese had drawn the main force of the Chinese away to defend the Chihua and Tungchih gates of the Tartar city, against both of which they directed a heavy artillery attack. The main battle was fought by the Japanese in front of the Chihua gate, which was defended by strong bodies on the battlemented wall on each side and on the huge tower over the gate, which contained thousands of loopholes commanding the street leading to the gate. Although Gen. Yamaguchi and Gen. Fukushima began to make their dispositions early, it was several hours before the last of their 54 guns were brought up and all were planted in an arc of a circle on the brow of a hill a mile from the gate. The bombardment was nearly constant for three hours, every attempt of the infantry to advance being met by the Chinese, who returned instantly to their loopholes and poured in as hot a fire as ever. The Japanese lost 200 men in attempting to storm the wall. They were still shelling the gate when the British Indian troops made their way into the sluice gate and marched into the British legation close by,

with which Gen. Chaffee also established communication without bringing up his troops.

The Japanese, keeping up their attack doggedly, could not get to the gate till night. When they did blow it open and enter they soon cleared the walls and tower. A Japanese detachment had already marched in by the Tungpien gate and gone up to the Japanese legation. Before night the different forces were encamped in the neighborhood of the legations.

The Chinese who retired from the outer wall went into the imperial city, from the walls and towers of which a fierce fire had been kept up all day upon the legations, and much firing was still going on. To stop it, the Indian troops manned the barricades about the British legation and a party of American marines cleared the Chen gate of the Tartar city, which the Russians, coming up with a battery, blew in. The Japanese general had a plan of which the other commanders were not fully cognizant or were not in accord with. As soon as they entered the Chinese city they sent a battalion of infantry to each of the main gates of the imperial city to guard them, in order to protect the Purple City and prevent any violation of the palace. Their object was to establish communication with some one within who could be accepted as representing the Chinese Government, so as to open a way to begin negotiations for the settlement. These guards, however, met with violent opposition, and instead of being able to deliver their communications, became involved in very sharp fighting, from which they suffered severely. The word that they endeavored to send through the gates of the Forbidden City was that there were there for the protection of the city and the Chinese within it. Gen. Chaffee's plan, which was the one recommended by some of the ministers and most of the missionaries and foreign residents, was to capture the Forbidden City and march in triumph into the palace, and thus humiliate the arrogant pride of the Chinese. Continued rifling from the lofty gates on the legations made their capture seem a necessary military measure. The advance was to be made through the Chien gate early on Aug. 15. The Russians were asked if they wished to join, but declined. American guns were first posted on the Chen gate commanding the walls of the Tartar city, on which tents and banners were seen in great numbers. When the American infantry advanced, no response having been made to the shell fire, the Russians sent an insignificant force so as to be represented, but Gen. Chaffee declined to recognize it. Beyond the Chen-Mun five massive walls bar the approach to the palace, penetrated by archways that are closed by heavy gates. The first archway, screened by a false gate and surmounted by towers, was vigorously defended, and when Capt. Reilly turned his guns on it he was killed by a musket ball. Guns were brought down, and the gate was finally opened by shooting off the locks and bars. Between that and the next gate the troops were exposed to a withering musketry fire, and had to go back and wait till the Chinese were shelled out of their position, a French battery taking part in the shelling. This was the gate giving entrance to the Purple City, an enormous defensive structure on which the Chinese troops made the main stand. From the top of this gate the infantry exchanged shots with the Chinese on the next one until they ceased firing. Then that one, too, was opened by blowing in the locks; but as the column was marching through the archway a enflading fire from the gate beyond compelled the men to fall back and remain under cover until shell fire directed through the arch cleared the

one also. But into that one, the outer gate of the palace, the Americans did not enter. Gen. Chaffee gave orders to halt, and some hours later, after consulting with the other generals, he withdrew his whole force to the camp outside the Tartar city. While the Americans were engaged in heavy fighting during this day, with no ostensible object except to discourage the Chinese in the imperial city from firing into the legation grounds, the Russians rested and the British remained in camp, except parties that were sent in search of valuable spoils. The Japanese were busy preparing a camp outside the Tartar city. The following day and the day after were given up to looting, which was freely done by Russians and French, done by Americans against orders, and systematically done by the British, who stored up the loot to sell it later at auction and distribute the proceeds among the men as prize money. Only the Japanese abstained from looting altogether, and placed guards over buildings that were likely to be plundered; and their example was followed tardily by the other nations, but only after many princely residences had been stripped of old porcelains, rich embroideries, choice furs, carved jade, and other treasures. A joint administration was organized by England, France, Japan, Russia, and the United States. The Emperor, Empress Dowager, princes, ministers, and court fled before the allies entered the city, escorted by 3,000 of Tung-Fuhsiang's troops. They escaped to Taiyuen-Fu, in Shansi, with the intention of proceeding ultimately to Shensi to establish a new seat of government in the city of Singan-Fu. Before the departure of the Empress four high officials were executed because of their pro-foreign sympathies. On Aug. 17 Russian and French troops, led by the French Gen. Frey and supported by Japanese, marched to the relief of the Catholics in the cathedral, who were still persistently attacked by the Chinese troops in the Tartar city. The Chuenchen gate was captured after a brief struggle. The Sihoa gate was stoutly defended, and so were a succession of earthworks that blocked the passage to the north cathedral. The generals decided to clear the Tartar city as well as the Chinese city of the Chinese regulars and the bands of Boxers that still held numerous points, but first to drive all the troops out of the imperial city. The French and Russians held the gates on the west side, which they occupied in relieving the cathedral. Americans were stationed at the south gate, British at the southeast gate, and Japanese at the others. All marched in on Aug. 17, meeting with no resistance, and after a parade through the palace, sentries were posted in the palace buildings to prevent looting and destruction. The summer palace outside was occupied by Japanese troops. Small flying columns operated in the surrounding country to clear it of troops and Boxers. A Japanese force marched southward on Aug. 24. Pao-Tang-Fu and other places were occupied. In proportion as the forces were split up their difficulties increased. Small bodies were attacked by the enemy courageously and often with success. The English and Americans made an attempt to restore and keep open the railroad. Later the task was given to the Russians by vote of the commanders, though against their protest.

Russian Campaign in Manchuria.—When the troubles arose in north China the Russians were pushing the construction of the Manchurian railroads with the greatest expedition. The railroad from Talienwan and Port Arthur had been laid northward for 323 miles to Tielin, 40 miles beyond Mukden, and the section was rapidly being laid from Harbin southward to meet it,

southeastward from Harbin toward Vladivostok, and northwestward to join the Siberian trunk line at Nerchensk in the Transbaikai, 900 miles altogether in Manchuria, with a prospect of having the line running from Vladivostok before the end of 1900. The activity of the Russians excited the people of Manchuria and made them especially susceptible to the Boxer propaganda, which spread in their province as in Shantung and Pechili, not without awakening the suspicion of the Russian authorities. When the Boxers began in the latter part of June to tear up the track and burn stations at points widely separated, sotnias of Cossacks were rapidly moved from place to place, and these military movements hastened an insurrection. When the Europeans seized the Taku forts the soldiers of the Chinese garrisons decamped in all directions and joined the bands that were formed everywhere to drive out the Russians. On June 25 the Amur troops were ordered to be put on a war footing, and reserves were called out in Siberia. The Boxers, defying the Governor of Mukden, seized arms and ammunition to attack the Russians at Tielin. In addition to 5,000 Cossacks permanently stationed along the line, 6,000 regular troops were sent into Manchuria from Port Arthur and from the Amur and Ussuri, and Cossacks were brought from the Transbaikai. The governors of Tsitsihar, Mukden, and Kirin offered to guard the railroad with Chinese soldiers, and guaranteed the security of their provinces if the Russians did not begin hostile action. They were assured that the troops would be used only against Hungu brigands and Boxer rebels. The French and English missionaries in Mukden who did not get away early were killed. The officials made a show of suppressing rioters, but did nothing. The agitation quickly spread, and several Manchu officials, as well as the Chinese troops, joined the revolutionary movement. Multitudes of Chinese coolies working on the Russian railroads left their task to drill with the Boxers, and those who would not were compelled to quit work by the Chinese railroad guards. The Mukden governor was imprisoned by his assistant, who led a large party of Boxers against Tielin. They attacked the coal mines and the railroad bridge at Leaoyang, and destroyed the Catholic church and sacked European shops in Mukden. The governors of Kirin and Tsitsihar, who had mobilized Chinese troops at the beginning of the disorders, announced that they could not answer for the conduct of their soldiery. On July 7, having received an Imperial edict directing Chinese troops to unite with the Boxers, the governors requested all Russian engineers to transfer the line to the Chinese and leave the country under escort. The Russian chief engineer reminded them of their duties toward Russia, and exhorted them not to be afraid of the Boxers, whom the Russians would help them to exterminate if they could not do it alone. On July 9 the chief engineer and his assistants, with the Cossack guard of 150 men, fled from Tielin before an immense number of Chinese. Simultaneously bands of Boxers and soldiers attacked other places on the line as far north as Harbin. Soon bodies of Chinese were moving against the Russians wherever they were found in Manchuria. They were formally notified by the Chinese officials that a state of war existed, and warned to leave the country and allow Chinese noncombatants in Russian territory to return to their homes. Ample opportunity was given whenever Chinese military officers gave the notice. All able-bodied men in Manchuria were called to arms. Most of the Russians employed on the railroads were safely escorted by Cossacks to the Russian

side of the border. Those at Harbin and the guards under Gen. Gerngross were besieged by the Chinese, and Gen. Gribsky gave his attention first to their rescue. A whole army corps was mobilized by this time, and another was called to arms in Siberia. A detachment of 8,000 men moved up the Sungari to Harbin, where the Russian railroad guards and workmen intrenched themselves; others advanced from the Ussuri and from Turikhotu. The Chinese garrison at Aigun was strengthened and the artillery increased. In the middle of July the Chinese attacked the Russian posts on the Amur frontier. A strong, well-equipped force began to bombard Blagovestchensk on July 15, the Chinese of Aigun having thrown up intrenchments and mounted 8 guns on their side of the river. Russian steamers with military supplies were stopped on the Amur. The attacking force was 8,000 strong, while the Russians were few, most of the troops having been sent to relieve Harbin. When the Chinese renewed their bombardment, on July 16, the Russians had 6 guns to answer them, Gen. Gribsky having arrived with a relief column, and on the third day he had troops enough to attack and burn Sakhalin. The Cossacks, in cleaning out the Chinese settlements, did not show the same regard for the laws of civilized warfare that the Chinese had shown. They killed many who attempted to flee across the river. The Governor of Tsitsihar protested against the cruelty of massacring all the inhabitants of the Chinese villages on the Amur and Sungari, and warned the Russians at Harbin that they must depart, as the two countries were at war. The chief engineer replied that he would send away women and children, but would remain at his post, as war did not exist between Russia and China. At another point the Chinese attempted to cross into Russian territory, but were driven back by the Cossacks, who soon had the Amur line free from danger of invasion and marched rapidly to the rescue of small parties of railroad guards and engineers who were still in Manchuria. When the Chinese renewed the bombardment of Blagovestchensk on July 22, Cossacks crossed the river and drove back their outposts. The Russians south of Harbin had concentrated at that place. The guards at Tielin, 200 strong, attempted to bring away not only Europeans but a great number of Chinese converts, and the detachment was nearly annihilated by Boxers. Missionaries and women and children made their way safely from Harbin to the Ussuri frontier. The garrison then attacked Chinese posts in the district. When the army corps reached the field of operations Gen. Grodekoff took the chief command. The column under Gen. Zakharoff destroyed the villages on the Sungari, and on July 26 captured the town of Sansing and its fortress, with 22 guns. The detachment marching from Stretensk seized and burned the gold-mining town of Mokho. On July 27 Boxers burned the Russian settlement in the town of Kalgan, the terminus of the Russian telegraph line in China. Blagovestchensk continued to be attacked daily from the opposite side of the river, where the Chinese force was increased until there were 18,000 troops, with 45 guns. On July 27 the local force that held the place, consisting of 3 battalions, 4 sotnias, and militia, with 10 guns, was re-enforced by 9 battalions and 8 sotnias, with 44 guns. The Russians then took the offensive. On Aug. 3 two columns crossed over from Blagovestchensk, took the town of Sakhalin, and the next day marched against Saigun, which was taken after a severe bombardment and an obstinate defense. Gen. Orloff's column occupied Hailar on July 30 after

defeating several thousand Chinese. The officials and employees from Harbin and other points on the East Chinese Railroad finally departed with their families and arrived safely at Kabarovka. 6,000 persons altogether, Gen. Zakharoff having arrived on Aug. 3 with his relief column and opened the way for their passage down the Sungari. The vanguard of Gen. Chichagoff's detachment from Nikolsk arrived simultaneously, having on the march from the Ussuri destroyed the Chinese fortress of Ekho.

On Aug. 4 the Russians under Admiral Alexeieff, the Russian commander-in-chief in China, took possession of the Chinese city of Newchwang after a bombardment by two gunboats. The population was disbanded and a Russian administration was introduced. A detachment marching from Port Arthur occupied the town of Gaiping. Most of the Chinese forces defeated in the north and north-west and the central parts of Manchuria retreated to Tsitsihar, against which the columns of Gens. Orloff, Renenkampf, Gribsky, Zakharoff, Gerngross, and Chichagoff directed their march. Gen. Renenkampf's Cossacks, pursuing the troops that retreated from Aigun, had several severe encounters, and at Chingan cut off their heavy artillery. On Aug. 16 they captured Mergen with its fortress. The Chinese officials co-operated with the Russians in pacifying the districts that were occupied by Russian troops. The fall of Pekin disheartened the Chinese forces in Manchuria, and when Gen. Orloff and Gen. Renenkampf approached Tsitsihar from two directions its occupation was effected without a severe contest. Gen. Orloff's progress was contested all the way. In Liaotung the Russian troops under Gen. Fleischer had a still harder struggle, as garrisons of Chinese regulars held Haicheng and other points. That place was stormed and captured on Aug. 12. When Tsitsihar fell the Russians were in possession of every important place in Manchuria with the exception of Mukden.

The Southern Provinces.—Li-Hung-Chang, when Viceroy of the Kwang provinces, received a dispatch from Yung-Lu telling him to disregard edicts in the future. He consulted with the Nankin and Wuchang viceroys, and together they decided that they would act independently of Pekin, avoid disputes with the European powers, and prevent anti-foreign outbreaks in their provinces, but at the same time prepare to resist European aggression. When the Taku forts were taken the Yangtse viceroys cabled to the Chinese ministers abroad that they were able to keep the peace in their provinces and insure the safety of missionaries and merchants, but if any foreign power sent war vessels up the Yangtse then they would not be responsible for misdeeds or massacres that might result, and China would pay no indemnity. Yuan-Shih-Kai, the Governor of Shantung, acted in agreement with the Viceroys Liu Kun-Yi and Chang-Chih-Tung, and maintained cordial relations with foreign officials. The Nankin viceroy, Liu Kun-Yi, enlisted a great number of soldiers and armed them from the arsenal of Shanghai, explaining that his object was to keep order and protect foreigners. The Imperial Government feared British aggression in the Yangtse valley, and ordered him to resist it. A fleet of Chinese war ships assembled at Shanghai with the avowed object of co-operating with the powers for the protection of life and property. Protests from the consuls and the threatening actions of British cruisers led to their withdrawal. The Governor of Shantung had an army ready to ward off any attack of the Germans. The British naval authorities sent no gunboats up the Yangtse after the



HON. EDWIN H. CONGER, UNITED STATES MINISTER, AND HIS FAMILY. Copyright, 1901, by J. C. Hammett.

viceroys' warning, neither would they permit Chinese gunboats to ascend the river. Troops were sent to be landed at Shanghai, with the explanation that British ships and forces were to be used to assist the viceroys in preserving order. The consuls of other powers declared that if the British Government landed troops, their governments would also. The two viceroys and Li-Hung-Chang requested the United States Government to use its influence to prevent the landing of foreign troops, which would only provoke disorders. On learning that Great Britain intended to land a force at Shanghai, the French Government ordered a detachment to be sent from Tonquin. The Viceroy Liu requested that no troops be landed, and the British troop ship sailed away. Eventually it was so arranged that equal forces both of British and of French troops were landed. An agreement entered into between the viceroys and the foreign consuls, whereby Liu ceased mounting guns in the Yangtse forts and stopped other war preparations in consideration of his being left to preserve the peace, was accepted by the United States Government, which promised to take no action so long as the viceroys maintained order. When the order came from Pekin to expel foreigners because their governments were making war on China, the great viceroys paid no attention to it, nor did the Governor of Shantung nor the Manchou Governor of Szechuen. The Governor of Chehkiang promulgated the edict, and the Governors of Hupeh, Hunan, and Honan were inclined to disregard the instructions of Chang-Chih-Tung, and allowed massacres of native Christians and the destruction of churches to take place. The new Governor of Yunnan ordered all foreigners to leave, upon which he received a warning from the French Government that he would be held personally responsible for any injury to Frenchmen or their property. The Governor of Shansi, Yu-

Hsien, who was the original patron of the Boxers, is believed to have ordered the extermination of missionaries and Christians in his province, where frightful massacres occurred. The missionaries were driven out of Shensi and Kiangsu. In Canton an agitation was started by the secret societies against both the foreigners and the dynasty. After the fall of Pekin an abortive rebellion was set on foot in the south of China by revolutionary reformers imbued with Western ideas. Funds were contributed by Chinese who have lived in America, Australia, and Singapore. Before the rising many arrests were made in different cities. The revolutionary movement extended over wide regions in the Yangtse valley, and had for its object the restoration of the Emperor Kwangsu to power and the reform of the administration. When the advance of the allied troops began, the viceroys of the central and southern provinces joined with Li-Hung-Chang in a series of appeals to the powers, asking them to send no more troops, to stay the advance, and to formulate the terms of a settlement. Troops were sent up to aid in the defense of Pekin. When the foreign troops entered Pekin the Nankin and Wuchang viceroys declared that if proper consideration and respect were not shown to the Empress they could not answer for the consequences, as it was a matter of the highest importance in the eyes of the Chinese nation.

Siege of the Legations.—For months before the destruction of the railroad and telegraph convinced the ministers at Pekin of the serious character of the anti-foreign movement, the missionaries in Shantung and Chi-Li endeavored to impress this upon them; French, Italian, and German missionaries appealing to their representatives on behalf of the Catholic missions, while the Protestants addressed the British and American ministers. The Boxers confined their operations to pillaging converts or destroying their houses if

they refused to pay the fines exacted. Such acts had been committed in other times without being followed by a general attack on foreigners. When any new outrage was reported by the missionaries the ministers made representations to the Chinese Government, and the Tsung-li-Yamen courteously expressed doubt, demanded proofs, and promised to have the Governor of Shantung or the Viceroy of Pechili investigate the case. That nothing was done to check the disturbances beyond the punishment of a few insignificant Boxers was in keeping with the ordinary history of foreign relations with China. Mr. Conger was the first minister who warned the Tsung-li-Yamen that unless the Chinese authorities re-established security for the life and property of Americans strong measures would be taken by the United States to protect them. A joint representation was made by the ministers in January, 1900, calling attention to the secret societies as obnoxious to the missions, not as a danger to Europeans, and especially to the Great Sword Society. The ministers knew little about the Boxers at that time, nor later, until their fanatical crusade spread through north China and millions of adepts from all classes were sworn to unite in the expulsion of foreigners and the redemption of the leased ports.

When Monsignor Favier's letter convinced M. Pichon of the dangerous situation in Pekin itself, the ministers of the powers had almost persuaded themselves that the crisis was past. A meeting of the diplomatic corps was called by the French minister, who impressed his own apprehensions upon his colleagues. A note was prepared demanding permission and facilities for bringing up to Pekin guards for the legations. In case this was refused a majority of the representatives agreed to the suggestion of the German minister, that they should recommend to their governments the concentration of a naval force at Shanhaikwan, whence a passage to Pekin could be forced by an international body of troops. The Tsung-li-Yamen, as was expected, objected to the bringing of foreign troops to Pekin as an insult to China, and an action that would fan the flame of anti-foreign feeling. Ample protection by Chinese troops was promised. The ministers would not discuss the question, declaring that the guards must come, with or without the consent of the Chinese Government. Prince Ching had an audience with the Empress Dowager, and induced her to consent to the arrival of guards rather than face a rupture with the powers. The French and Russian guards had already landed, and the Tsung-li-Yamen was informed that the force would be larger if the Government persisted in refusing its acquiescence. The ministers accepted the representation of the Tsung-li-Yamen that the Boxers were rebels against the Government, but they were now aware that the soldiers were making common cause with these rebels, and this mutinous attitude of the army was the chief reason alleged for sending for their own troops to protect them. Their departure from Taku was delayed, to give time to the Chinese Government to reconsider its decision. The Government had already repaired the strip of the Tientsin Railroad that had been demolished by the Boxers, who were told in a proclamation that it was Government property, paid for by Government funds.

It was rumored that the Chinese Empress intended to flee with the Emperor and court to Singan Fu, in Shensi, in order to escape from the Boxers. The Russian minister was instructed to support any Chinese authority in Pekin that was able to maintain order in case the regular Government collapsed. On June 1 the Church of England

missionaries Robinson and Norman were murdered by Boxers at Yung-Ching, 40 miles south of Pekin. Sir Claude MacDonald demanded of the Government that it should rescue the latter, who had been carried off and was not known to be dead. The ministers of the Yamen gave the stereotyped reply that the Government could only refer the matter to the viceroy, who had already been instructed to send troops to the spot. Prince Ching admitted, when the British minister warned him that failure to suppress the Boxers was leading straight to foreign intervention, that the Government was reluctant to deal harshly with the anti-foreign movement because it was popular. He did not conceal the fact that the ignorant conservative advisers of the Empress Dowager had enlisted her sympathies in favor of the anti-foreign crusade, and that the intelligent statesmen who appreciated the seriousness of the situation were powerless to remedy the matter. A force of 6,000 Chinese troops had been ordered up from Tientsin to guard the railroad.

The legation guards were delayed on their journey at Tientsin, where the governor declined to furnish engines and cars until the foreign commanders threatened to take these by force and proceed without his permission. The total number of foreign troops introduced—Russian, French, American, Japanese, British, German, Italian, and Austrian—was 450. Immense throngs looked on in complete silence when the troops marched through Pekin, where they arrived on June 1. Three days later all traffic on the Tientsin Railroad was suspended, the Boxers having overcome the Chinese troops guarding the line and torn up the rails for long distances. The Russian minister offered the assistance of Russian troops to suppress the Boxer outbreak. The Boxers from the south and east began to pour into Pekin about June 7, after Kang-Yi with secret instructions from the Empress Dowager had annulled the order for their dispersal just given by two Chinese commissioners and enforced by Gen. Nieh's troops. At the same time Tung-Fuhsian's Kansu troops left their camp south of Pekin and were quartered by order of the Empress inside of the city walls. Boxers streamed in by tens of thousands and stalked the streets, with their long swords and bright red badges, breathing destruction to the foreign devils and performing their magic rites in open places in sight of the Pekin people, who up to this time had believed that the Empress Dowager would suppress these lawless hordes. When the American missionaries were in danger at Tungchau and Paoting-Fu, the Tsung-li-Yamen promised stringent measures, and imperial edicts were issued insisting that the Boxers must reform, otherwise the Grand Secretary, Yung-Lu, would order Gen. Tung-Fuhsian and Gen. Ma-Yukun to attack and destroy them.

On June 7 a decree was published ascribing the trouble to the favor shown to converts in lawsuits and the admission of bad characters into the Christian bodies, and stating that bad characters among the Boxers, making use of the anti-Christian feeling aroused by these causes, had destroyed chapels and state railroads. Ringleaders in such proceedings must be punished—not those whom they misled—and fresh authority was given to generals to effect the arrest of such ringleaders. The American Methodist compound was put into a defensible condition and stocked with provisions for a siege. Before June 9 all foreigners except those who had been gathered into the legations or the north cathedral of the Roman Catholics were quartered, about 70 altogether, besides 600 converts whom the missionaries refused to abandon.

The Roman Catholic mission gave asylum to 2,000 converts, and several hundreds were received at different times into the British legation. A guard of 20 marines under Capt. Hall was sent by Minister Conger to help defend the Methodist compound.

The feeling of the court circles in regard to the occupation of the military ports by European governments, and their assertion of spheres of influence embracing the best parts of China, was expressed in edicts of the Empress Dowager, describing the foreigners as robbers of Chinese terri-

reflected in the remotest provinces, where the anti-European spirit was strong. The French consular officers in Yunnan were compelled to quit their posts when Prince Tuan sent a reactionary mandarin to supersede the governor of the province.

The author of most of the acts and edicts of the Government hostile to Europeans was Kang-Yi. Whenever he was not present, Prince Ching and his Chinese colleagues prevailed upon the Empress to issue orders and publish edicts quite different from those that had just before gone



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BUILDING IN WHICH THE AMERICANS WERE QUARTERED DURING THE SIEGE.

tory, and people who had expanded the rights of commerce and intercourse and the privilege of propagating Christianity into claims for seizing territories and subjugating Chinese to foreign rule. When the Boxers first appeared in Pekin and began to attack the native Christians, the legation guards had several fights with them in the streets and killed a number. This led the Government to abandon its attitude of impartiality between the Christian Chinese and the Boxers, and to condone the misdeeds of the latter on the ground that they were provoked by the violent conduct of the European troops patrolling the streets unlawfully. The assemblage of war ships at the mouth of the Peiho, the landing of marines, the seizure of the railroad terminus at Tangku, and the preparations to send additional guards to Pekin made the Empress Dowager throw herself into the hands of the warlike Manchu party entirely. Tung-Fuhsiang was ordered to bring his troops from the hunting park up to Pekin, and the Boxers were virtually invited into the capital.

The entrance of the Boxers and the unruly Mohammedan soldiers into Pekin was synchronous with the transfer of the principal offices in the Government to the most reactionary of the Manchus. Prince Ching, the only member of the Tsung-li-Yamen possessing a knowledge of foreign affairs, was superseded as president by Prince Tuan, and three other Manchus of the Conservative stripe were appointed, while one Chinese retired. The serious state of affairs in Pekin was

forth. Twice orders were issued to respect the sanctity of the legations and to allow the Europeans to take converts under their protection.

On June 11 Sujiyama, the Japanese Secretary of Legation, while setting out for Tientsin to inform his Government of the situation, was killed by Chinese soldiers outside the city gates. On that day the telegraph line to Kalgan was cut, the Tientsin telegraph having been broken several days before. From that time for many weeks no communications passed between the foreigners shut up in Pekin and the outside world. On the next day the Boxers made an open attack on the British patrol. On June 13 the Boxers began the work of razing all buildings in Pekin not protected by foreign military, that were owned or occupied by foreigners. When the east and south Roman Catholic cathedrals were burned many native Christians lost their lives. A rescue party shot many Boxers who were massacring Christians, and a second one, led by Dr. Morrison and containing French and German marines, brought away a large number of Christians, who were lodged in a palace adjacent to the British legation. Buildings associated with foreigners or foreign methods were burned with the rest. The destruction of the compound of the Maritime Customs entailed a heavy pecuniary loss on the Chinese Government. The electric light works, and even the Pekin University with its library, were burned. For several days fires raged in all quarters of the city, obscuring the sky with their

smoke. On June 16 the flames from a steam flour mill and a foreign drug store spread to adjacent buildings, and a strong wind carried the conflagration on until the richest fur and cloth stores and the most important banks were in ashes. The Boxers supplicated the fire god in vain to spare the great tower in the south wall, which was opened only for the passage of the Emperor when he visited the Temple of Heaven or that of the God of Agriculture.

On the day following the entrance of their main body the Boxers made the first attack on the legations, to which the troops replied with a volley, killing a number, wounding many, and causing the rest to retire quickly out of sight. In their retreat they came upon and set fire to a mission compound that the missionaries had abandoned, leaving there 200 converts with their families, all of whom perished in the flames or were slain in trying to escape. The same night they burned several foreign houses, and on the night following, in two divisions of about 2,000 each, they renewed the attack on the legations. Several volleys were fired by the troops, putting the bands to flight; and as they fled in disorder the troops sallied out and chased them a short distance, killing a great number. After this a new proclamation of the Empress Dowager ordered the Boxers to disperse, and threatened all who remained in Peking with arrest and punishment as bad characters, since all good Boxers must already have departed in obedience to previous edicts. Soldiers were at the same time detailed to patrol the streets and special guards were set to protect the legations. The Boxers denounced it as false, the work of the Chinese party, and contrary to former decrees, and subsequently they murdered several high Chinese officials.

When Admiral Seymour's expedition set out without leave, the Chinese Government protested through its representatives abroad that it was a hostile act. The advocates of peace and moderation in Peking were rendered dumb. The Boxers were supplied with weapons from the Government armories and recognized as a militia for the defense of the country, and, recruited by deserting soldiers from Nieh's army, they were authorized to stop the expedition, for which purpose Tung-Fuhsiang's troops also marched out.

On June 16 the Empress Dowager summoned a Grand Council. She is said to have first consulted the Manchu princes and nobles and then to have announced their decision to the Grand Council, which was for war against foreigners until these should abate their pretensions. The Chinese officials protested that a general war against Christendom would be fatal, and urged that time should be taken to make a choice of enemies and also of friends, some advocating an understanding with Russia, others one with Great Britain and Japan. The Boxers in Peking from this time grew bolder, and the lawless soldiery of Tung-Fuhsiang joined them in attacks on the legations.

In the night of June 16 American and Russian sentries were fired upon by Chinese soldiers. On June 17 a collision occurred between a detachment of German and Austrian troops and Chinese regulars, some of whom were killed, which led to a request of the Tsung-li-Yamen that the foreign guards should be withdrawn, assurance of protection being given. The ministers replied that thereafter their own soldiers would protect them. Large bodies of Chinese troops encamped near the legations.

The capture of the Taku forts by the powers and the subsequent advance of the relieving column were accepted by the Chinese Government and

by all authorities in north China as acts of war. The Empress proclaimed a state of war called on the ministers of the powers with Europeans in the legations to withdraw under safe conduct to within the lines of the allies Tientsin, and sent orders to the provincial authorities to notify Europeans to leave the country, and to raise troops for the purpose of repelling foreign barbarians and maintaining the national prestige. Gen. Nieh, who had been sent out to suppress the Boxers when they damaged the roads and then recalled because he carried out orders with too much violence, was commanded to assist the Boxers and the troops of Tung-Fuhsiang in resisting the advance of the allies. When the ministers refused to leave the legations under the escort of Chinese troops, they were regularly besieged in the legation compounds and attacked nightly by the Boxers and mutinous soldiery, intermittently were shelled by the imperial troops. The first notice to the foreign ministers to leave Peking was delivered on June 19 in an identical note from the Tsung-li-Yamen, stating that admirals had demanded the surrender of the Taku forts and threatened to attack them and take them by force, showing the intention of the powers to break off friendly relations. The princes and ministers, astonished at this news, could not promise complete protection to the legations from Boxer banditti if war ensued, and therefore begged the ministers to depart for Tientsin with their guards under the protection of an escort of Chinese troops that had been provided for the purpose. The ministers, who knew nothing before this of the action at Taku, asked for a conference with Prince Ching and Prince Tuan, to satisfy themselves as to the sufficiency of the military escort and the means of transport, and to stipulate that members of the Tsung-li-Yamen should accompany the expedition. The Russian minister, who hoped for a peaceful outcome. The German minister, Baron von Ketteler, who felt called upon to uphold the interests of his Government with firmness and vigor, strongly dissented from the opinion of most of his colleagues that it was necessary to leave Peking, and determined to convey a serious warning to the Tsung-li-Yamen, and the Manchu princes in particular, that if they broke off diplomatic relations with European nations they would bring about the fall of the dynasty. Although he received no reply from the Tsung-li-Yamen to his demand for an interview, he set out without an armed escort in the morning of June 20, and as he passed a squad of soldiers he was shot dead in his sedan chair by the officer in command of the troops, his interpreter reported.

The death of the German minister convinced other ministers that they could not depend on Chinese escort, and determined them to fortify their legations and defend them until the relief column arrived. The missionaries in their quarters of the city, the staff of the Maritime Customs and other Europeans and Americans, were escorted to the British legation. At the time when the time set for their departure by the Tsung-li-Yamen was up, the troops of Tung-Fuhsiang opened a rifle fire on the Austrian legation. On the day following the Tsung-li-Yamen sent a courteous reply to the diplomatic body, stating that the warning to leave Peking had been given in consideration of the dangers that the ministers incurred by remaining, but since the country outside was also disturbed and the time given too brief for proper preparations, the Yamen agreed to the delay and to further negotiation; the relations between China and the powers had been strained by any animosity on the part of

Chinese Government, which could not have foreseen the outbreak of the people against the Christians, and the Government desired to learn from foreign ministers what were the intentions and instructions of their governments. The ministers replied in a collective communication that they had none but friendly instructions, and that detachments were on their way to Peking for no other purpose than to assure safety. In calling attention to the firing upon the legation buildings they were convinced that it was chargeable to rebels or to soldiers acting independently, and they looked to the Chinese Government to put a stop to it.

For the next three weeks no communications passed between the Chinese Foreign Office and the legations, which were closely invested by Boxers and attacked with shell and rifle fire by imperial troops. The Austrians abandoned their buildings on June 20 and retreated to the French legation. The French and Italians evacuated their legations, and resumed their positions elsewhere. The German legation was abandoned on June 22. The British legation was the only one in defensive position. Adjacent buildings were torn down to deprive attacking parties of cover, to avert the danger of fire, and to give material for fortification. When Prince Su abandoned his palace to take refuge in the imperial city it was occupied by Christian converts, some of whom he had already received in the outer court at the request of the ministers. These Chinese were employed in the work of fortification, in which all the inmates of the crowded British legation helped. Committees were formed to take charge of the administrative details. F. D. Gamewell, an American missionary having a knowledge of engineering and of Chinese construction and the management of Chinese labor, superintended the erection of the barricades according to the plans of the military men. Sir Claude Macdonald was recognized as the chief in military matters in other matters, although sometimes the military officers objected to carrying out his orders.

On June 22 the Boxers burned the Italian and Dutch legations and set fire to buildings within the British compound, which were saved with difficulty. The legation guards numbered only—79 British, 75 French, 75 Russians, 58 Americans, 50 Germans, 40 Italians, 30 Austrians, and Japanese. The periodical attacks made by organized bodies of imperial troops were mere demonstrations. A small force of them with modern arms, of which there were hundreds in Peking, could have demolished the legations at any moment. Even the Boxers, outnumbering the defenders fifty to one, could have forced the position if they had not been restrained. From June 23 the legations were completely besieged. The Imperial Guards under Yung-Lu continued to protect the legations at the instance of the Emperor and of Prince Ching and the Tsung-li-Yamen. Kang-Yi and Prince Tuan encouraged the Boxers and the troops under Tung-Fuhsiang, of whom there were 1000 in Peking, to attack the legations, in order to frighten the ministers into leaving Peking. The only one in authority acknowledged connivance

in such attacks, which were officially ascribed to riotous Boxers and mutinous troops. The barricades of the besiegers were gradually pushed close up to those of the legations. The anti-foreign party had its own way in Peking whenever the allies made a fresh move toward the city, but whenever they paused, more peaceful edicts were issued, and southern viceroys, who refused to support the warlike policy and petitioned the Empress Dowager to suppress the Boxers and protect the legations, appealed to the powers to stay their advance and present their terms of peace, promising on their part to check anti-foreign disturbances in their provinces, but adding that they could not guarantee the safety of the legations nor vouch for the temper of the people in their own provinces if the powers proceeded to the occupation of Peking and the humiliation of the Empress. An imperial



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RUINS OF THE AUSTRIAN LEGATION, DESTROYED BY THE BOMBARDMENT.

edict of July 1 expressed disappointment in the achievements of the Boxer militia, who should have combated the enemy and averted the outrages China had suffered at the hands of the foreigners. They were still urged to proceed northward to ward off the danger that threatened Tientsin and Peking, but the disloyal bands that robbed and murdered in their name would be distinguished from the true Boxers and would be rigidly suppressed.

The legations were barricaded on every side with a succession of walls built of large bricks taken from houses, and on top of the walls and at the entrance of the buildings were placed sand bags, many of them made of silks, curtains, and garments, until the materials finally gave out and the fortifications had to be constructed of bricks alone.

When the allies relieved the forces besieged at Tientsin, notice was given to the ministers once more that they must leave Peking at once, the military authorities promising to protect them on the route to Tientsin. The ministers replied that they would remain and would protect themselves. On June 27, when the time limit of this ultimatum had expired, the Chinese troops again attacked the legations with shells and rifle fire. The Chinese Government, or the military leaders who had usurped all authority, determined to expel them by force, and on June 26 a message was conveyed to the consuls in the treaty ports which announced that they were being convoyed down to Tientsin by imperial troops. The death of Baron von

Ketteler was reported, but was not officially acknowledged till July 1. When Tung-Fuhsiang renewed the attack on the legations, Yung-Lu got word to the allied forces through Sheng, the Director General of Railroads, urging their speedy advance, as he and Prince Ching were no longer able to control events in Pekin and the soldiery were rioting in the streets.

After the second attack of Tung-Fuhsiang's troops the Chinese authorities sent some food to the legations, which the ministers declined to accept. Further attacks were opposed by the 10,000 men of the Manchu garrison controlled by Prince Ching, who killed many Boxers and Kansu soldiers in endeavoring to drive them from their positions in front of the legations. At the same time edicts were published praising Boxers for their patriotic services in uprooting Christianity, and commanding viceroys and governors to expel missionaries and compel Chinese Christians to recant. The siege of the legations became closer than ever, and the Boxers pushed their line so near that they succeeded in undermining and blowing up a corner of the French legation. In their determination to destroy the British legation they burned the adjoining Hanlin Academy with its invaluable library. They edged their barricades close up to those of the legation and placed two guns in position to make a breach in the defenses. The defenders had an old Chinese cannon, for which they improvised ammunition, but they considered their position extremely critical when the American guards sallied out in the night of July 3 and killed many Boxers, and a larger force made a sortie on July 6, killing 200 soldiers of Tung-Fuhsiang's force. Heavy guns were then put in position to bombard the legations, and the Governor of Shantung himself reported that they were destroyed and all the Europeans killed. All the legations still standing were burned except the British, American, German, Japanese, and parts of the French and the Russian. All the members of the diplomatic corps took refuge behind the defenses of the British legation. At this time the Empress Dowager issued warlike edicts declaring that there could be no reconciliation with Christianity, which the whole nation, including military men, *literati*, nobles, and princes, had united to stamp out since the foreigners had begun a war against China; that the bitter feeling against foreigners had reached such a pitch that any attempt to put down the people would be dangerous; and that while the Empress was anxious to protect the legations, the Chinese people were willing to put it to a test whether they or the foreigners were stronger; hence all governors should immediately enroll troops for the defense of their districts and act according to local circumstances on their own judgment, but for any loss of territory they would be held to strict account. The Yangtse and southern viceroys did after this enlist troops and mount guns, but used the discretion confided to them to protest their innocence of hostile feelings toward Europeans and their intention to use their forces only for the suppression of anti-foreign or rebellious disorders. At the same time the Chinese provincial officials conveyed warnings to the Empress to protect the legations and to avoid a general war against foreigners, and through Chinese ministers abroad and foreign consuls they cautioned the powers that continued aggression, and above all an attack on Pekin, might result in disaster to the legations. The governors of 11 provinces in a joint memorial recommended protection to foreign merchants and missionaries, whether there was war or not, in order to preserve China's prestige as a civilized state, and the rescue of the ministers so as

to render negotiations still possible, in which the governments of the ministers saved might use their influence in China's favor; also an apology to Germany for the murder of Baron von Ketteler, and a proposal for the mediation of other powers, with assurances of China's good intentions to be given specifically to France and the United States; furthermore, full compensation for all losses of foreign lives and property, and orders to the military and civil authorities to punish bandits and marauding troops. Li-Hung-Chang, whom the Empress in her perplexity summoned from Canton to take the viceroyalty of Pechili and arrange matters with the powers, at the same time that he approached the United States and other powers with proposals of peace, informed the Empress that Great Britain and France made the heads of the Chinese Government personally responsible for the lives of their ministers and citizens in Pekin, and that it was necessary that the Boxer movement should be stopped altogether and the war party put down.

The first tidings received direct from the foreign ministers in Pekin was Mr. Conger's telegram of July 18, saying that they were under shot and shell and only quick relief would save them from massacre. The capture of Tientsin by the allies produced an immediate alleviation of the situation. The war party was no longer confident, and the troops that returned to Pekin with Gen. Nieh assisted the forces of Prince Ching and Yung-Lu to guard the legations. The memorial of the southern viceroys had its effect on the Empress Dowager, and still more the admonition of Li-Hung-Chang. From July 16 there was an armistice. The besieged, who were reduced to eating horseflesh, were able to obtain new supplies from outside, and foodstuffs, fruit, and vegetables were sent in by order of the Government. When an official of the Tsung-li-Yamen visited the legations on July 18 he renewed the proposal that the ministers should remove to Tientsin under an escort of imperial troops, until the population of Pekin became quiet and order was restored. An edict of July 18 enjoined protection of foreigners and promised compensation. The Banner troops attempted to clear away the Boxers and Kansu braves who still held the legations invested, and several encounters took place in the streets.

When the allies at Tientsin assumed the offensive again and made ready for the advance upon Pekin, the situation of the beleaguered Europeans became critical once more. Li-Ping-Heng, who took command of the defense of Pekin, began by beheading Hsu-Ching-Cheng, ex-minister to Russia, and another member of the Tsung-li-Yamen, because they advised making an effort to conciliate the powers. All food supplies were cut off from the legations, and the Chinese Government became more urgent and threatening in the demand that they should depart for Tientsin. Rifle firing was recommenced, and they strengthened their fortifications. Their ammunition was almost gone, and their provisions were so low that they reduced the rations. When Li-Ping-Heng and Tung-Fuhsiang left with their forces to resist the advance of the allies, Yung-Lu was able to give them more efficient protection. As soon as the ministers were permitted to send cipher dispatches to their governments, they all declared that foreign troops only could escort them safely. Besides being unwilling to trust a Chinese escort, they were unwilling to leave the Chinese converts to be massacred. Although the Russian and the Dutch governments authorized their ministers to accept the Chinese escort, all the ministers felt safe where they were, and no one was willing to break

their union, although their situation was becoming desperate. On Aug. 5 shots were exchanged anew. In the incessant fighting for a month, 60 of the marines were killed and 110 wounded. The Americans, who held a strong and important position on the outer wall, had done valiant service and lost 16 men. The French and Austrians defended heroically the French legation, which was the key to the position and the post of danger, and they lost heavily, the Austrians half their number. When the Chinese forces retreated on Pekin and the allies began their assault on the city, the legations were attacked fiercely, and were shelled even after the foreign troops entered the city. While the troops were bombarding the city, guns in the imperial city were turned on the legations; and although Prince Ching ordered his officers to cease firing on pain of death, the fire continued all day with artillery and musketry. The losses in the last days of the siege raised the total to 67 killed and 160 wounded. The losses at the legation guards inflicted on the Chinese from first to last were more than 3,000.

The Roman Catholics shut up in the north cathedral were attacked fiercely and incessantly from the time when the Boxers first entered Pekin. Bishop Favier and his priests, with 42 guards and 100 converts, were prepared for a long siege, having bought rifles and ammunition for some of the converts and an abundance of supplies. The Chinese attacked them day and night and battered the east face of the cathedral with shell fire. Once they exploded a mine, which killed both of the French officers and 3 of the guards, besides nearly 100 converts. The defenders still held out, and at the Chinese out of the great breach they had made until it was repaired.

Intervention of the Powers.—The ministers at Pekin made the first formal demand for the arrest of members of the Boxer society who organized street disturbances and seditious meetings or circulated manifestoes against foreigners in a collective note delivered to the Tsung-li-Yamen on May 21. The Russian representative went alone to the Tsung-li-Yamen and endeavored to convince the Chinese ministers of the necessity of prompt and stringent measures for the suppression of the Boxer revolt. The Tsung-li-Yamen replied to the collective note on May 24, saying that the Government on May 17 issued a decree in accordance with which the provincial officials of Pechili drawn up measures for dealing with the revolt which corresponded in their main features with those demanded, and would suffice for the detection of the society and prevent further disturbances. The foreign ministers, considering this reply evasive and unsatisfactory, came together to discuss the landing of forces.

The secretary of the Tsung-li-Yamen went to the Russian minister to inform him that severe measures had been taken to suppress the Boxers. A detachment of troops had in fact been sent against them. A few days later the Boxers decided this force, killing the commander and 60 officers. At this stage the Chinese Government, its edicts and actions, showed remarkable vacillation and infirmity of purpose. The appointment of Li-Hung-Chang—who had already been exiled from the capital to Nankin—to the viceroyalty of Canton, where he was entirely out of touch with the capital, betrayed the desire of the dominant party to thrust aside every restraining influence. When the admirals demanded the surrender of the Taku forts, Admiral Kempf refused to join in an ultimatum or in the bombardment, for he thought it was against the policy and wishes of the United States Government to be entangled

with other foreign powers in such a step, and, moreover, that it endangered the lives of people in the interior in advance of absolute necessity for such drastic action. The act of the Chinese in opening fire without warning and in firing on the Monocacy he considered an act of open hostility that justified him in making common cause with the foreign forces for the protection of national honor and the preservation of American lives and property, and in this resolution he was confirmed later by the knowledge that the Chinese Government was paralyzed and in secret edicts showed sympathy with the Boxers.

When Admiral Seymour's force started from Tientsin, Boxers and a large part of the Kansu soldiery advanced from Pekin to tear up the railroad and meet the foreign invaders. They had first to deal with Nieh's troops that had been stationed along both the Tientsin and the Lu-Han lines to guard the tracks and stations. On June 5 they had a severe encounter with these troops near Tientsin, some of whom ran away, but some held their ground, and killed 500 Boxers. No further attempt was made by Nieh to protect the line, for his troops were ordered to retire, and he was censured for killing patriotic subjects. The Kansu soldiers and the Boxers then tore up the railroads very effectively, bending the rails by main strength, throwing bolts and fishplates away, and destroying the grade in the vicinity of Pekin. Tientsin was then besieged and Admiral Seymour's retreat intercepted. The United States Government decided on concurrent action with the European powers, while disclaiming an alliance, and Russia abandoned her independent attitude and joined in the accord. The admirals decided on an international blockade at Taku, and the occupation of a strip of territory where foreigners could take refuge under the guns of the fleets. This course was approved by all the foreign ministers at Pekin, who also discussed the advisability of demanding an audience with the Empress Regent.



GENERAL ADNA R. CHAFFEE.

The proposal of the foreign representatives at Pekin that a naval demonstration should be made by the powers in the Gulf of Pechili was not at first well received by the European cabinets. Russia in particular—and France following the lead of Russia—was very reluctant to intervene or even to exert pressure on the Chinese Government at a juncture when such action would excite to a higher pitch the anti-foreign sentiment in China and render it more difficult for the Empress Dowager to become emancipated from the influence of her European-hating advisers and listen once more to the rational statesmen of China. This led the Russian minister in Pekin to hold aloof from the earlier representations of his colleagues. Count Muravieff, down to the time of the Boxer irruption into Pekin, would not join in menaces or pressure, believing that the real state of things had been concealed from the Empress Dowager, and that if the Chinese Government were left alone, better

counsels would prevail. The situation in southern and central China, where a strong and growing revolutionary party aimed to upset the dynasty, seemed to the Russian chancellor to be more critical. The Japanese Government also was anxious not to complicate a position of affairs already serious. A cautious course was desired, too, by the United States. Germany, whose action had done most to rouse the national excitement, and Great Britain, which had followed the German initiative in the partition of China as a check to the spread of Russian influence, were least disposed to take account of the patriotic excitement they had done most to provoke, and took the lead in menacing the Chinese Government. No government, however suspicious of the motives of others, desired to precipitate an international crisis. None was prepared for isolated action, and a previous agreement among all the powers was understood to be the condition of any important step to be taken. Japan was received into this concert more thoroughly and cordially than before, and for military action was the most important member, because Japan alone had troops sufficient and ready to accomplish any operations in China that might become necessary. Russia made the first offer to lend troops for the suppression of the Boxers when the Chinese Government represented that the rebellion was too serious to be easily quelled with its own forces. This offer was followed by a similar one from Japan. Both were taken into consideration and courteously declined.

The admirals on June 5 decided in conference to assume, with the object of protecting the lives and property of their nationals, an attitude of armed defense, their military movements to be directed not against the Chinese Government, with which their countries were at peace, but against the insurgents seeking its overthrow. Should the rebels prove stronger than the Government, aid would be lent to the Government to quell them; but if the Chinese Government did not attack the rebels, then the allied powers would proceed to attack them. Each commander was to comply with the wishes or obtain the concurrence of his minister unless communication with Peking should be severed. Should a situation arise affecting the interests of all the foreign powers in common, they agreed then to act in concert, seeking instructions from home if there were time to do so; but in case the emergency were too pressing, they would determine their course after consultation together. At a later meeting they agreed to land men at once on the motion of the American admiral. Meanwhile Admiral Seymour had sent re-enforcements at the request of the British minister, and his course was followed by other admirals until railroad communication was interrupted. Thereafter followed the march of an allied force under Admiral Seymour toward Peking. The governments of the powers having naval forces in the Peiho—America, Austria-Hungary, England, France, Germany, Italy, Japan, and Russia—gave full discretion to their admirals to act in consultation with the other senior naval officers as the emergency seemed to demand. The French admiral suggested giving command of the detachments that were sent up to Tientsin to Col. Wogack, a Russian officer of experience. The German admiral held it better that each detachment should act independently in concert with its consul until an emergency should arise making it necessary to unite them under a single command. The British admiral saw no necessity of choosing a commanding officer before a column started for Peking. When the relief column did start the command was given to him as senior officer.

When all communications with Peking were cut off and Admiral Seymour's relieving force was stopped, troops were dispatched to Taku from the nearest foreign garrisons—German troops from Kiaochau, British from Hong-Kong, Russians from Port Arthur, and Japanese troops. On June 1 a Russian force of 1,700 men left Tientsin to join Admiral Seymour, but only succeeded in rescuing his exhausted and decimated expedition. A Russian contingent of 6,000 soldiers was ordered to Taku to be at the disposal of the Russian minister. After the capture of the Taku forts the British Government arranged for the dispatch of 10,000 Indian troops under command of Sir A. Gaselee. A third brigade, intended for the protection of Shanghai and the British interests in the Yangtze valley, was mobilized while the allies were marching to Peking. France arranged to bring the strength of its contingent up to 15,000 men.

The Government of Great Britain sounded the Japanese Government on June 25 with reference to the immediate dispatch of 25,000 or 30,000 Japanese troops for the restoration of order in Tientsin and Peking, and inquired of the Russian and German governments especially if they objected. Japan expressed a willingness to undertake the task on receiving assurances that it would not lead to complications with other powers. The Russian Government, while not disposed to give a mandate, did not wish to hinder Japan's freedom of action. The German Government would not assent to Japanese intervention unless convinced that the interests of third powers were left untouched. The Japanese Government ordered the mobilization of 22,000 men, and urged the advisability of an exchange of views as to joint measures, considering the troubles in the north of China so grave that an expedition of 70,000 men would be required, which it was not prepared to furnish without being indemnified for outlay of money as well as protected from complications by previous agreement among the powers. The British Government offered to guarantee the expenses of an immediate expedition for the rescue of the legations, any ulterior operations to be left to future consideration.

Soon after the bombardment of the legations began detailed accounts were circulated from Shanghai that the ministers and other foreigners in Peking were massacred. A report of that nature was received later at St. Petersburg from Manchuria. It was reported also that the Emperor and the Empress Dowager had been poisoned. After June 11 there was no telegraphic communication with Peking, but a message from Sir Robert Hart came through by courier, declaring the situation desperate on June 25. The Chinese ministers in Europe and the United States and the viceroys in the south denied the stories that the ministers in Peking were dead, though they admitted later that they had no authentic information.

Secretary Hay defined the attitude of the United States in a circular dispatch of July 3. Adhering to the policy initiated by the United States in 1842 of peace with the Chinese nation, the furtherance of commerce, and the protection of its citizens by all means guaranteed by extra-territorial treaties or by the law of nations, the United States Government proposed to hold responsible the authors of any wrong done to Americans, and view the condition in Peking as one of virtual anarchy whereby power and responsibility were devolved upon the local and provincial authorities, who so long as they were not in collusion with the rebellion and used their power to protect foreign life and property, would be regarded as representing the Chinese people, with whom the United

states seeks to remain in peace and friendship. The United States would continue to act concurrently with the other powers in opening up communication with Peking and rescuing American officials and missionaries, in affording protection to American life and property and guarding legitimate American interests everywhere in China, and in aiding to prevent the spread of disorders and the recurrence of such disasters. The solution sought by the United States was one that should bring about permanent safety and peace in China, reserve China as a territorial and administrative entity, protect all rights guaranteed to friendly powers by treaty and international law, and safeguard to the world the principle of equal and impartial trade with all parts of the Chinese Empire.

On July 3 the Chinese Emperor appealed to the Mikado to intervene for the salvation of China, and proposed an alliance, on the ground that if China's independence were destroyed the position of Japan would become untenable; occupied in suppressing the insurgents, China might fail to resist successfully the invaders, and hence entreated Japan to restore peace and save the Chinese Empire from the ambition of the strong Western powers. The Japanese Emperor replied that

China suppressed the rising and rescued the ministers the powers would recognize her sincerity, and thus calamity to the empire would be averted; that Japan had sent troops solely for these objects, and in the ultimate negotiations would act a helpful part provided China rescued the foreigners and suppressed the rebellion. A message sent at the same time to the Czar explained that measures were taken on the insistence of the Russian minister against agitators who stirred up hatred to Christians; but already eminent persons and princes as well as the common people and the troops were roused by false rumors, and the Government had to stay its hand for fear that repression would cause a general rising against foreigners. This attitude led the powers to suspect connivance, and their military measures had complicated the situation and weakened hopes of a peaceful issue. The Emperor applied to the Czar, on the strength of two centuries of friendship between the two countries, to indicate what measures would be calculated to save China and to take the initiative in carrying them out. The Czar replied on July 13 that, guided by traditional friendship for China, and wishing to see the misfortunes and complications threatening the Celestial Empire averted, the Russian Government was willing to render assistance to the legitimate Government in China in suppressing the agitation, and would confine its efforts solely to the restoration of order and tranquillity. The Czar hoped that the Emperor of China would take determined steps to pacify the country and secure the safety of the lives and property of Russians and other foreigners, but the absence of exact information regarding the fate of the legations rendered it difficult to intervene in China's favor at that moment.

On July 17 an imperial edict was issued expressing regret at the murder of the Japanese *attaché* and the German minister, and the desire of the Chinese Government to punish the murderers and to pay compensation for the death or loss of property of missionaries or merchants and to protect the legations. The origin of the conflict was the long-standing antagonism of the people of China to Christians and their missions. The fall of the Taku forts precipitated the meeting of force with force. The Imperial Government, having due regard to the importance of international intercourse, was still unwilling to interrupt diplomatic relations, although the fighting at Tientsin

could only be regarded as an act of hostility. In communicating this edict to Secretary Hay the Chinese minister, Wu-Ting-Fang, presented a telegraphic message from the Chinese Emperor to President McKinley, in which he placed special reliance on the United States, which sought only international commerce, and had so long maintained friendly relations with China that neither country suspected or distrusted the other, to devise measures and take the initiative in bringing about a concert of the powers for the settlement of the difficulty into which China had irresistibly been driven, incurring well-nigh universal indignation because the recent outbreaks of mutual antipathy between the people and the Christian missions had led the foreign powers to suspect that the attitude of the Imperial Government was favorable to the people and prejudicial to the missions, with the result that the Taku forts had been attacked and captured, and consequently there had been a clashing of the forces with calamitous results. To this message, dated July 19, President McKinley replied on July 23, saying that the United States Government, desiring nothing but what was just and equitable, as the Emperor recognized, had landed troops to rescue the legation from danger and afford protection to Americans, and all the powers publicly avowed a similar motive. Inferring from the Emperor's message that the malefactors besieging the legations, far from receiving favor or encouragement, were actually in rebellion against the imperial authorities, the President urged upon the Chinese Government to give a public assurance whether the foreign ministers were alive, and, if so, in what condition; to put them in immediate and free communication with their respective governments, and to remove all danger to their lives and liberty, and to place the imperial authorities in communication with the relief expedition, so that co-operation could be secured between them for the liberation of the legations, the protection of foreigners, and the restoration of order. If these objects were secured the Government of the United States believed that no obstacle would be found to exist on the part of the powers to an amicable settlement of all questions arising out of the recent trouble, and it proffered its friendly offices, with the assent of the other powers, to secure such a settlement on the fulfillment of these conditions. Simultaneously with the appeal for President McKinley's mediation a telegram from the Emperor to the President of the French Republic stated that rebels had taken advantage of hostilities between the people and the Christians to commit depredations, and the foreign nations as a consequence suspected the court of displaying partiality toward the people and jealousy toward the Christians, whereupon occurred the capture of the forts and subsequent military action, and a succession of misfortunes rendering the situation complicated and dangerous. China looked chiefly to France, which had settled other questions by conciliatory methods, to settle the difficulties that now by the force of circumstances pressed so hard upon her as to bring down universal wrath; therefore the Emperor hoped that the President of the republic would find means to arrange matters and would take the initiative in changing the situation. M. Loubet replied to the Emperor that his request could not be examined until effective protection and complete liberty for their communications with their governments were secured to the French representative in Peking and his colleagues; until Prince Tuan and the high officials responsible for the existing state of affairs were removed from power pending their inevitable punishment; until the authorities and troops

throughout the empire received orders to cease hostilities against foreigners; and until measures were taken for the vigorous repression of the Boxer insurrection. So long as these indispensable guarantees were not furnished nothing was in order but military action. A message was also dispatched to the German Emperor of the same date containing a similar attestation of peaceful and friendly relations and absence of distrust on both sides, a similar explanation of the unfortunate and complicated situation in which China was placed, the foreign states having entertained the suspicion that the Government was conniving at the persecution of Christians when outbreaks of hatred between the people and the native Christians led to disturbances during which Baron von Ketteler was murdered—an unexpected outrage, for which the Emperor expressed the deepest regret. This suspicion grew at the very time that the Government was investigating the crime with the object of punishing the murderers. The seizure of the Taku forts followed and hostilities began. The position was the more difficult to reduce to order because the Chinese Government did not intend to permit any change to take place in the existing good



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CHINESE POLICE, LI-HUNG-CHANG'S BODYGUARD.

relations. The force of circumstances placed it in a position where it was not free to act as it would wish. The only way to remove the resentment generally felt against the Chinese Government was to call in the assistance of Germany; therefore the Emperor of China begged the German Emperor to consider a plan by which the continuance of friendly relations might be secured and to assume the leadership in the restoration of the former peaceful state of affairs. Count von Billow, the German Secretary of State for Foreign Affairs, refused to communicate this telegraphic message to the Emperor-King until the truth should be known concerning the fate of the legationists and other foreigners in Peking, and until the Chinese Government atoned for the atrocious murder of the German minister, and gave a sufficient guarantee that its conduct in future would be in accordance with the dictates of international law and of civilization.

Li-Hung-Chang was appointed a peace commissioner to deal with the powers. Only the United States, Japan, and Russia were disposed to accept his credentials, and they only provisionally. The

American consul at Shanghai was instructed to place himself in communication with Li and avail himself of his influence in securing the objects laid down in the circular note of July 3. When the ministers in Peking were notified by the Tsung-li-Yamen that Li-Hung-Chang had been directed to negotiate with the powers, the French minister sent a dispatch on Aug. 9 protesting against negotiations that would stop the advance of the foreign troops while legations were hemmed in by barricades and reduced to siege rations of horse meat and rice, and were in imminent danger of falling into the hands of the Boxers. The Chinese Government at this time was endeavoring to force the ministers to leave with a Chinese escort, informed them that their governments had so directed, and sent word abroad that a reliable escort had been provided. When the ministers repeatedly refused, the Chinese Government requested the powers, through the Chinese ministers in Europe and America, to order their departure for the sake of their own safety. Mr. Conger telegraphed that imperial troops were firing on the legations, and that it would be certain death for the ministers to leave Peking as proposed in the edict of Aug. 2. In this edict the Imperial Government expressed a doubt as to its power to restore order and secure absolute safety in Peking. In a memorandum sent through Minister Wu on Aug. 8, Acting Secretary of State Adee demanded the immediate cessation of hostile attacks by imperial troops upon the legations, and said that if the Chinese Government was unable to protect the ministers in Peking it could not protect them on the journey to the coast; he suggested, therefore, that the Imperial Government enter into communication with the relief column and co-operate with it for the liberation of the legations, the protection of foreigners, and the restoration of order. In a later telegram Mr. Conger said that foreign troops only could safely escort them, and they must be in sufficient force to guard 800 foreigners and 3,000 native Christians, whom they could not abandon to certain massacre. Similar messages were received by the other governments. The imperial edict appointing Li-Hung-Chang plenipotentiary was issued on Aug. 8. The United States Government, when it was communicated with, Aug. 12, with a request for cessation of hostilities pending negotiations, expressed willingness to enter upon negotiations with Li-Hung-Chang with the desire to continue friendly relations with China, but pointed out that general negotiations were impossible so long as the ministers of the powers and persons under their protection remained in a position of restraint and danger, nor could the powers cease their efforts for the delivery of their representatives except under arrangements adequate to accomplish their peaceful deliverance. The United States stood ready to agree with the other powers to cease hostile demonstrations on condition that a sufficient body of the relieving forces be permitted to enter Peking and escort the ministers and residents back to Tientsin, the arrangements and dispositions to be satisfactory to the commanding generals. When the allied troops approached Tungchau, Li-Hung-Chang made an earnest request that they halt there, where they would be met by high officials of the Chinese Government empowered to negotiate an armistice. An advance on Peking he believed would shake the empire to its foundations, besides causing the deepest alarm to the Emperor and the Dowager Empress and calamities to the people. He pleaded especially with the United States and Japan, because they had shown a willingness to stop hostile action if the ministers were delivered safely, observing that a further advance would

ound the feelings of all China's people, high and low, while a compliance with his request would win their gratitude. At the same time he memorialized the Imperial Government to appoint an envoy with authority to negotiate an armistice with the military commanders. Authority was sent to Gen. Chaffee from Washington on Aug. 12 to make an arrangement in concert with the other commanders to receive the ministers at the gate of the city, if it could be done with regard to their safety, in which case the United States would agree to an armistice for a specified time, with a view to arranging terms of peace. Another message from Mr. Conger mentioned attacks by imperial troops, on receipt of which a warning was sent to Li-Hung-Chang that the instructions could not be carried out nor the advance of the forces in Pekin be stayed while these attacks continued. Li-Hung-Chang made his final appeal, and Mr. Conger agreed in principle to an armistice to be arranged in concert with the other powers on the very day when the allied troops made their entry into Pekin. On Aug. 19 he approached the powers with a request that they should appoint plenipotentiaries with powers to open negotiations for the settlement of all difficulties, they having accomplished the sole purpose of the march on Pekin, which they all declared to be the deliverance of the ministers, who were found to be in good health. He was ready to conduct the negotiations in Pekin or in Tientsin, or wherever the powers chose. The Japanese Government advised the Chinese Government to appoint plenipotentiaries acceptable to the powers, suggesting the Viceroy of Nanking and Li-Hung-Chang, and offered to further the negotiations, not only on the conditions that China should express regrets, acknowledge formally its errors, and spontaneously offer to make a complete indemnity. The good offices of Japan on behalf of the Dowager Empress and the Emperor were volunteered previous to the capture of Pekin, with a statement of the purpose to get hold of Prince Tuan, Kang, and other officials held to be chiefly responsible. Li-Hung-Chang memorialized the Empress to remain in Pekin. Her flight and the disappearance of every vestige of the imperial authority from the capital left Li-Hung-Chang, who was personally trusted by some of the powers, with no recognizable Government to which he could refer peace proposals. Russia, as well as the United States and Japan, was willing to treat with him as *de facto* the accredited representative of the legitimate court, but Russia's willingness made England suspicious, because he was believed to have been the chief agent in extending Russian influence in China. He was formerly the chief adviser of the Empress Dowager, but in the present crisis he had taken a stand with the southern Viceroy against the Manchu party, and when summoned to Pekin went only to Shanghai, and from there memorialized the Empress to dismiss the war clique from power and destroy the Boxers. For his disobedience he was even deprived of his appointment as Viceroy of Pechili before the court in Pekin. His proposal for the powers to appoint plenipotentiaries was not definitely accepted by any of them. The admirals would not even let him go to Pekin or communicate with the local authorities unless he was accepted as the Chinese Viceroy by the powers. From this decision the American and Russian admirals dissented. The United States Government based its refusal to treat with him on the ground that China had failed to fulfill the conditions laid down in the American declarations. On Aug. 25 the Russian Government proclaimed its policy in a circular, declaring that its immediate objects it had in view at the outset

were to protect the Russian legation and save Russian subjects from the criminal designs of Chinese rebels, and to help the Chinese Government in its struggle with them in the interest of the re-establishment of legal order. All the powers had the same objects in view, and since a comparatively insignificant detachment of the allied forces had succeeded in relieving the legations and chasing the rebels away from the capital, Russia suggested as the fundamental principles to guide the powers in China the maintenance of a common agreement among themselves, the maintenance of the former organization in China, the avoidance of everything tending to a partition of the Chinese Empire, and the establishment by the powers of a legal central government at Pekin alone to preserve order and tranquillity. Russia had occupied Newchwang and invaded Manchuria for the purpose of warding off the aggressive acts of Chinese rebels; but as soon as lasting order could be established and indispensable measures taken for the protection of railroad construction which China had assured by formal agreement, then Russian troops would be recalled from Manchuria, provided the action of other powers placed no obstacles in the way. The establishment of a legal central government with which the powers could co-operate in the establishment of order was rendered difficult by the departure from the capital of the Emperor and Empress Dowager and the Tsung-li-Yamen. Under such circumstances the Russian Government saw no good reason for the ministers accredited to the Chinese Government remaining in Pekin, and therefore intended to withdraw the Russian minister and the Russian troops to Tientsin. As soon as a legal Chinese Government should again take the reins of power and appoint a representative with full authority to negotiate, Russia, after coming to an agreement with the other powers, would send a plenipotentiary to the place appointed for the negotiations. The United States Government was in full accord with this policy, seeing no prospect of the Chinese Emperor and Empress Dowager returning to Pekin while it was occupied by foreign troops, or of successful negotiations until the Chinese Government was re-established in its capital. On Aug. 29 the Secretary of State sent a circular note appealing to the powers to conclude peace with China, and indicating the readiness of the United States to withdraw from Pekin in order to permit the imperial court to return. The powers, however, could not easily agree on the terms to be exacted from China. The United States Government, while making the Russian policy its own, was unwilling to act with Russia or to raise any obstacle to a common agreement. Pursuing an independent course, it reduced its force in Pekin to the proportions of a legation guard. A part of the Russian troops had already been withdrawn, and gradually the others were recalled. The Chinese Government intimated its intention to return to Pekin and open negotiations as soon as the foreign troops evacuated Chinese territory, and also its purpose to punish officials who were implicated in the anti-foreign movement. Certain officials were executed, degraded, or exiled, and others were falsely reported to have been punished or to have committed suicide. Some of those, however, who were believed by the powers to be most guilty seemed to be still held in high favor at court. It was not till Nov. 14 that an imperial edict was promulgated depriving Princes Tuan and Chuang of all rank and offices and handing them over to the imperial clan court for punishment, and decreeing the banishment of Yu-Hsien to the frontiers. The Russian Government suggested that in case of a divergence of views the

question of indemnities might be referred to the International Court of Arbitration at The Hague.

On Oct. 4 the French Government suggested as the demands to be put forward by the powers as a basis for negotiation, that the Chinese Government should punish the guilty parties who might be designated by the representatives of the powers at Peking; the continuance of the interdiction against the importation of arms into China; equitable indemnities for the governments, companies, and individuals; the organization in Peking of a permanent legation guard; the dismantling of the forts at Taku; and the military occupation of two or three points on the road from Tientsin to Peking. Russia accepted these propositions with some reservations; Austria and Italy approved them as a whole; Germany desired to have the German point of view taken into consideration, and to insure a thorough investigation and the condign punishment of all guilty persons; Great Britain was unwilling to agree to the permanent interdiction of the importation of war munitions. The United States Government in its reply assumed that the interdiction was not intended to be permanent. On constitutional grounds the President could not undertake to maintain military guards in Peking or on the road from Tientsin. In the course of further correspondence, objections to the razing of Chinese forts, the establishment of international military posts in China, and the prohibition of the trade in war munitions were plainly intimated, and a similar view was taken by Japan and Great Britain.

On Oct. 16 Germany and Great Britain signed a mutual agreement to uphold for all China, so far as they can exercise their influence, that the rivers and littoral shall remain open and free to trade and to every form of economic activity for the peoples of all countries without distinction. Both governments agreed that they would not make use of the present complications to obtain for themselves any territorial advantage in Chinese dominion, and that they would direct their policy toward maintaining undiminished the territorial condition of the Chinese Empire; but in case of another power making use of the complications in China to obtain territorial advantages under any form whatever, the two contracting parties reserved for themselves the right to come to a preliminary understanding regarding the eventual steps to be taken for the protection of their own interests. The other governments were invited to accept the principles recorded in this agreement; and all assented to the declarations for the preservation of the territorial integrity of the Chinese Empire and the open door.

Count von Waldersee, German field marshal, was appointed commander in chief of the allied forces, the Czar having suggested or expressed approval of his selection in a preliminary correspondence with Kaiser Wilhelm, and all the cabinets having later accepted him at the proposal of the German Government. He did not arrive in China till after the occupation of Peking, and the large German military expedition came later. He sent flying columns through the districts adjacent to Peking and the railroads, but did not come into contact with the principal Chinese forces. The Chinese court did not arrive in Singan-Fu until Oct. 14. Meanwhile negotiations were opened at Peking between the ministers of the powers and the Chinese commissioners who had been suggested by them, namely, Li-Hung-Chang and Prince Ching, with whom were associated the Viceroy Liu and Chang. The French proposals, so far as they were accepted by the powers, were the bases of negotiation.

The German Government, in a circular note on Sept. 18, had demanded as a preliminary condition of entering upon diplomatic dealings with the Chinese Government that the persons whom the powers should designate as the instigators of the crimes against the law of nations should be delivered over and punished. The ministers at Peking, on Oct. 10, informally approved the following demands to be put forward as a basis of negotiations: (1) Punishment of the officials implicated; (2) payment of an indemnity; (3) dismantling of the Taku and other forts between Tientsin and the sea; (4) prohibition of importation of firearms; (5) establishment of permanent legation guards; (6) abolition of the Tsung-li-Yamen and appointment of one minister for foreign affairs; (7) suspension for five years of the provincial examinations in those districts where foreigners have been murdered; (8) provision for rational intercourse with the Emperor. All these provisions would be required to be promulgated by imperial decrees. Prince Ching and Li-Hung-Chang, on Oct. 16, in a circular note ascribing the disturbances to the Boxers, admitting that these had received support from princes and ministers, and stating that the punishment of the latter according to Chinese law had been ordered by imperial decree, proposed a preliminary convention containing the following bases of peace negotiations: (1) China expresses regret for the recent occurrences, and promises that they shall never recur; (2) China admits her liability to pay an indemnity; (3) regarding commercial treaties, China is willing to reaffirm or modify the old treaties or to make new ones; (4) the general principles having been approved, China asks that the Tsung-li-Yamen may be permitted to resume its functions, and that the foreign troops may be withdrawn as soon as the various items of the indemnities have been arranged; (5) negotiations having been begun, the foreign powers should declare an armistice and cease military action. The Chinese plenipotentiaries proposed to begin negotiations on Oct. 20. M. Pichon demanded the execution of Prince Tuan, Kang-Yi, and Tung-Fuhsiang, as the principal guilty parties, and declared that hostilities could not cease until their heads had fallen. The foreign governments, at the suggestion of M. Delcassé, had given instructions to their representatives in Peking to begin negotiations at once with Li-Hung-Chang, who was provided with authentic powers the reality of which had been verified. Great Britain, the United States, and Japan maintained their reservations regarding the original French propositions. The court arrived at Singan-Fu, the ancient capital, and was under the domination of Prince Tuan and Gen. Tung-Fuhsiang, whose decapitation was demanded by some of the powers, and was entirely in the power of Tung-Fuhsiang's Kansu soldiery. Meanwhile the allied troops, re-enforced by the German division and under the general command of Field-Marshal von Waldersee, scoured the whole province of Pechili, destroying villages that harbored Boxers and executing all who were identified as Boxers or accused of molesting native Christians. After Pao-Ting-Fu was occupied, the principal officials who were responsible for the massacre at that place were executed after an investigation by an international commission.

On Nov. 11 the ministers, having presented the names of 11 high officials and princes whose death was demanded, agreed on the terms to be presented as the basis for a preliminary treaty, subject to the approval of their governments. These terms, which they intended to press upon China in a conjoint note, were the following: (1) An extraordinary mission headed by an imperial prince

all be sent to Berlin in order to express the regret of the Emperor of China and of the Chinese Government for the murder of Baron von Ketteler. The scene of the murder a monument worthy the assassinated minister shall be erected with inscription in Latin, German, and Chinese, expressing the regret of the Emperor of China. (2) The death penalty is to be inflicted upon Princes Tuan and Chuang, upon Duke Lan, and, further, upon Ying-nien, Kang-yi, Chao-Shu-Chiao, Tung-hsiang, Yu-Hsien, and other ringleaders, whose names will be given by the representatives of the powers. In all places where foreigners have been killed or maltreated official examinations shall be suspended for five years. (3) The Chinese Government shall erect a monument in every foreign or international cemetery which has been desecrated where the graves have been destroyed. The prohibition of the import of arms into China shall be maintained till further notice. (5) China has to pay a just indemnity to governments, corporations, and individuals, as well as to those Chinese who suffered during the recent events in person or in property in consequence of being in the service of foreigners. (6) Every single foreign power is granted the right of maintaining a permanent legation guard and of placing the quarter of Pekin where the legations are situated in a state of defence. Chinese are not to be allowed to live in that quarter of Pekin. (7) The Taku forts and those forts which might prevent free communication between Pekin and the sea shall be razed. (8) The powers acquire the right of occupying certain points on which they will agree among themselves, with the object of maintaining free communication between the capital and the sea. (9) The Chinese Government is bound to post imperial decrees for two years at all subprefectures. By these decrees to belong to any anti-foreign sect is forever forbidden under penalty of death; the punishments inflicted upon the guilty are recorded; to prevent fresh disturbances, it is declared that the viceroys, as well as the provincial and local authorities, are made responsible for the maintenance of order in their districts. In the event of fresh anti-foreign disturbances or other infringements of the treaties which are not at once suppressed and avenged by punishment of the guilty, these officials shall be promptly deposed and never again intrusted with official functions or invested with fresh dignities. (10) The Chinese Government undertakes to enter upon negotiations with regard to such alterations in the existing commercial and navigation treaties as the foreign governments consider to be desirable, as well as regarding other matters which are concerned with facilitating commercial relations. (11) The Chinese Government shall be bound to reform the Chinese Foreign Office and the court ceremonial at the reception of the foreign representatives, and to do so in the sense which shall be defined by the foreign powers.

The execution by the allies, in accordance with the verdict of the international commission, of Ting-ting, acting Viceroy of Chih-li, and of other high officials, while negotiations were pending, called forth an indignant protest from the Chinese authorities. Li-Hung-Chang remonstrated against punitive expeditions that were carried on more extensively and relentlessly than ever. When he asserted that the Chinese troops were dealing effectively with rebels, and reminded the ministers that the sole avowed object of the powers in sending troops to China was to relieve the legations, a note was returned to him. The United States Government, in a circular note, urged the powers to agree upon terms that it would not be im-

possible for China to fulfill. To demand the decapitation of the most highly placed and powerful men in the country and the payment of an indemnity that would be beyond the power of China to raise seemed likely to prolong indefinitely the foreign occupation. After further correspondence between the ministers and their governments, and some delay due to the replacing of Sir Claude MacDonald as British minister by Ernest Satow, the ministers agreed, on Dec. 4, upon the text of a joint note, which was subsequently amended in accordance with the views of various governments communicated to their ministers, who were instructed to sign it, and on Dec. 22 did sign it, in the final form given below:

"During the months of May, June, July, and August of the current year serious disturbances broke out in the northern provinces of China, in which atrocious crimes unparalleled in history and outrages against the law of nations, against the laws of humanity, and against civilization, were committed under particularly odious circumstances. The principal of these crimes were the following:

"1. On the 20th of June, his Excellency Baron von Ketteler, while on his way to the Tsung-li-Yamen, in the performance of his official functions, was murdered by soldiers of the regular army, acting under orders of their chiefs.

"2. On the same day the foreign legations were attacked and besieged. The attacks continued without intermission until the 14th of August, on which date the arrival of the foreign forces put an end to them. These attacks were made by the regular troops, who joined the Boxers, and who obeyed the orders of the court emanating from the imperial palace. At the same time the Chinese Government officially declared, by its representatives abroad, that it guaranteed the security of the legations.

"3. On the 11th of June Mr. Sujiyama, chancellor of the legation of Japan, while in the discharge of an official mission, was killed by regulars at the gates of the city. In Pekin and in several provinces foreigners were murdered, tortured, or attacked by the Boxers and the regular troops, and such as escaped death owed their salvation solely to their own determined resistance. Their establishments were looted and destroyed.

"4. Foreign cemeteries, at Pekin especially, were desecrated, the graves opened and the remains scattered abroad.

"These occurrences necessarily led the foreign powers to dispatch their troops to China to the end of protecting the lives of their representatives and nationals and restoring order. During their march to Pekin the allied forces met with resistance from the Chinese army and had to overcome it by force.

"Inasmuch as China has recognized her responsibility, expressed regret, and evinced a desire to see an end put to the situation created by the aforesaid disturbances, the powers have determined to accede to her request upon the irrevocable conditions enumerated below, which they deem indispensable to expiate the crimes committed and to prevent their recurrence:

"I. (a) The dispatch to Berlin of an extraordinary mission headed by an imperial prince, in order to express the regrets of his Majesty the Emperor of China and of the Chinese Government for the assassination of his Excellency, the late Baron von Ketteler, minister of Germany. (b) The erection on the spot of the assassination of a commemorative monument, befitting the rank of the deceased, bearing an inscription in the Latin, German, and

Chinese languages expressing the regrets of the Emperor of China for the murder.

"II. (a) The severest punishment for the persons designated in the imperial decree of Sept. 25, 1900, and for those whom the representatives of the powers shall subsequently designate. (b) The suspension for five years of all official examinations in all the cities where foreigners have been massacred or have been subjected to cruel treatment.

"III. Honorable reparation to be made by the Chinese Government to the Japanese Government for the murder of Mr. Sujiyama.

"IV. An expiatory monument to be erected by the Imperial Chinese Government in every foreign or international cemetery which has been desecrated or in which the graves have been destroyed.

"V. The maintenance, under conditions to be determined by the powers, of the interdiction against the importation of arms as well as of materials employed exclusively for the manufacture of arms and ammunition.

"VI. Equitable indemnities for the governments, societies, companies, and individuals, as well as for Chinese who during the late occurrences have suffered in person or in property in consequence of their being in the service of foreigners. China to adopt financial measures acceptable to the powers for the purpose of guaranteeing the payment of said indemnities and the interest and amortization of the loans.

"VII. The right for each power to maintain a permanent guard for its legation, and to put the diplomatic quarter in a defensible condition, the Chinese having no right to reside in that quarter.

"VIII. The destruction of the forts which might obstruct free communication between Peking and the sea.

"IX. The right to the military occupation of certain points, to be determined by an understanding among the powers, in order to maintain open communication between the capital and the sea.

"X. The Chinese Government to cause to be published during two years in all the subprefectures an imperial decree: (a) Embodying a perpetual prohibition, under penalty of death, of membership in any anti-foreign society; (b) enumerating the punishments that shall have been inflicted on the guilty, together with the suspension of all official examinations in the cities where foreigners have been murdered or have been subjected to cruel treatment; and (c) furthermore, an imperial decree to be issued and published throughout the empire, ordering that the governors general (viceroys), governors, and all provincial or local officials shall be held responsible for the maintenance of order within their respective jurisdictions, and that in the event of renewed anti-foreign disturbances or any other infractions of treaty occurring and which shall not forthwith be suppressed and the guilty persons punished, they, the said officials, shall be immediately removed and forever disqualified from holding any office or honors.

"XI. The Chinese Government to undertake to negotiate amendments to the treaties of commerce and navigation considered useful by the foreign powers, and upon other matters pertaining to their commercial relations, with the object of facilitating them.

"XII. The Chinese Government to determine in what manner to reform the Department of Foreign Affairs and to modify the court ceremonials concerning the reception of foreign representatives, in the manner to be indicated by the powers.

"Until the Chinese Government has complied with the above conditions to the satisfaction of the powers, the undersigned can hold out no ex-

pectation that the occupation of Peking and the province of Chih-li by the general forces can be brought to a conclusion."

CHRISTIAN ARCHÆOLOGY, CONGRESS.

OF. The second Congress of Christian Archaeology met in Rome, under the patronage of the Holy See, April 17. The Abbé Duchesne presided, and in his address spoke of the science of Christian archaeology as relating to the study of the material monuments and memorials of the Christian past. The literature of Christianity and its liturgies were also to be subjects of study in two additional sections of the congress. Communications were presented by Cardinal Rampolla concerning an ancient index of the Christian cemeteries of Rome of the first half of the fourth century and a document concerning St. Melanion which he had discovered.

Père Delatre reported on the Christian antiquarian remains visible at Carthage. Prof. Bottani commented upon a papyrus containing a letter of a priestess of Alexandria, written during the third century, which was thought to relate to a priestess of Petesuchos who had become a Christian, but having lapsed in the persecution under Decius, was seeking a certificate that she had offered sacrifice to Petesuchos. Among the many other papers read by the ecclesiastics composing the congress were those on the discovery of the names of early teachers in the Christian schools of Alexandria on three Roman edifices which had been preserved by the Church, viz., the tomb of Hadrian as the Castle of St. Angelo, the meeting hall of the Senate as the Church of Sant' Adriano with that of Santa Martina, and the Pantheon as the Church of Santa Maria ad Martyres; a statuette in the Berlin Museum, formerly part of a Roman lamp, supposed to be identified as St. Peter's; a recent supposed identification of the burial place of St. Peter and St. Marcellinus at the Tor Marancia, with the valuable paintings contained therein; catacomb and basilica remains at Monastir, near Salona, with inscriptions having an important relation to the history of dogma; the origin of the columns of the altar of St. Mark in Venice; the substitution of Christian worship for the shrines of the gods on the Roman Campagna; two ancient Christian libraries recently found in Egypt; and a review of the progress of the study of Christian archaeology of late years in papal Rome.

The discovery, by Prof. Hebardy, of a Greek inscription in the Doric dialect on the gateway of the old palace at Ephesus was reported to the Archaeological Congress at Rome by Prof. Bohner, of the University of Vienna, and a facsimile of the inscription has been published. The inscription purports to comprise copies of a letter from Abgarus, King of Edessa, and an answer from Jesus Christ. The letter is as follows: "I have heard of thee and the cures wrought by thee without herbs or medicines, for it is reported that thou restorest sight to the blind, makest the lame walk, cleansest the leper, raisest the dead, castest out devils and unclean spirits, and givest health to those tormented by diseases of long continuance. Hearing all this of thee, I am fully persuaded that thou art very God, come down from heaven to do such miracles, or that thou, the Son of God, performest them. Wherefore I have sent thee a few lines, entreating thee to come hither and cure my diseases. Besides, hearing the Jews murmur against thee and continue to do thee mischief, I invite thee to my city, which is but a little one, and beautiful and sufficient to entertain thee both."

The pretended answer from Jesus is: "Blessed

thou, believing me, whom thou hast not seen, it is written of me, 'They that have seen me all not believe; they that have not seen me all believe.' Be saved; but concerning the matter thou hast written about, with this I acquaint thee, that all things for which I was sent hither must be fulfilled. Then I shall be taken up and returned to Him who sent me; but after my ascension I will send one of my disciples that shall cure thee of the distemper and give life to all them that with thee."

In reference to this matter, Eusebius (A. D. 320) wrote that Abgarus, being a great sufferer from disease, and having heard of the miracles of Jesus, wrote a letter to him, and that Jesus, in answer, sent him a picture of himself, and promised that after his death he would send one of his disciples. The discovery, while it does not afford any confirmation to the story, furnishes evidence that it is currently received in Ephesus at the time the description was made, probably in the fifth century A. D.

CHRISTIAN ENDEAVOR, SOCIETIES

The International Convention of the Societies of Christian Endeavor was held in London, beginning with meetings of welcome, July 14, in Peter Hall, Albert Hall, and the Alexandra Palace. The general secretary reported the whole present number of societies as being 59,712, with 1,000,000 members. The enrollment in the United States represented 43,262 societies; in the United Kingdom, about 7,000; in Australasia, more than 100; in Germany, 168; in Africa, 130; in France, 100; in Jamaica, 120; in China, 148; in India, 459; in Mexico, 110; in Madagascar, 93; in Japan, 73; Turkey, 60; in Spain, 36; while societies existed nearly every other nation. Topics were discussed during the five days of the meetings relative to The Dawning Age and its Problems, World-wide Endeavor, Temperance, Citizenship, The Missionary Outlook, and Pentecostal Power. "The roll call of nations" was responded to by representatives of twenty nationalities speaking of the condition and prospects of Christian Endeavor work in their several countries. Opportunities were given for the special representation of "denominational rallies" of the various denominations with which Christian Endeavor Societies are connected. The Bishop of London addressed the meeting on the Spirit of Christ and the Cultivation of the Christian Temper. The "unior rally" was participated in by several thousand children.

CHRISTIAN SCIENCE, a doctrinal, curative, and spiritual system, discovered in 1866 by Mary Baker Eddy. In that year, shut off from the outside world because of the effects of an accident pronounced incurable by physicians, and turning herself up to a close study of the Scriptures, Mrs. Eddy claims to have discovered and demonstrated in her own person the doctrine which she subsequently gave to the world, and which is now proclaimed and practiced by many thousands of her followers. In 1875 the Christian Science text-book, *Science and Health*, with key to the Scriptures, prepared by Mrs. Eddy in the intervening years, was published in Boston. According to this book its tenets are as follow:

1. As adherents of Truth, we take the Scriptures as our guide to eternal Life.
2. We acknowledge and adore one Supreme Infinite God. We acknowledge one Christ, the Holy Ghost, and man as the Divine image and likeness.
3. God's forgiveness of sin, in the destruction of sin, and the understanding that sin and suffering are not eternal.
4. The atonement as the efficacy and evidence of

divine Love, of man's unity with God, and the great merits of Jesus, the Way-Shower.

5. Universal Salvation as demonstrated by Jesus, the Galilean prophet, in the power of Truth over all error, sin, sickness, and death; and the resurrection of human faith and understanding to seize the great possibilities and living energies of divine Life.

6. We solemnly promise to strive, watch, and pray for the Mind to be in us which was also in Christ Jesus, to love one another, and to be meek, merciful, just, and pure.*

The Christian Science Trinity or divine Principle is "Life, Truth, Love."

Mrs. Eddy also declares, in *Science and Health*, that "no analogy exists between the hypotheses of agnosticism, pantheism, theosophy, spiritualism, and Christian Science," and that "electrocism, hypnotism, and mesmerism are its antipodes." She adds: "I have set forth Christian Science and its application to disease only as I have found them. I have demonstrated the effects of Truth on the health, longevity, and morals of men through mind, and I have found nothing in ancient or modern systems on which to found my own except the teachings of our Great Master, and the lives of apostles and prophets."

In brief, the discovery and claim put forth by Christian Science is, that all mankind who come into true spiritual oneness with the divine mind may work upon themselves and others the miracles wrought by Christ and his apostles, to whom he imparted the knowledge, and who, in turn, imparted it to the early Christian Church, which practiced it while faith was strong. That the promise and power to heal the sick, cast out evil, and raise the dying was not confined to any special time or period, but is a fact demonstrable throughout all time, Christ being the great "way-shower."

Mrs. Eddy has explained Christian Science as follows: "There is but one God, one Christ, and one Jesus of Nazareth. God is mind and all in all; therefore there can be nothing real but infinite mind and its manifestations. The compound individual idea of divine principle is Christ, the spiritual idea of truth, personifying the primal order of being and as perfect as its source. Jesus represented the incarnation of Christ's principle. He stood for truth, healing the sick and sinful, and triumphing over the tomb. By his metaphysical therapeutics it was proved that miracles do not violate, but fulfill, the law. The curative system is based upon the unreality of matter. Nothing being real but Spirit, disease is an illusion of mortal mind, growing out of false conditions of thought. There is but one real mind in the universe, viz., God. Man being the idea of God, all is well with him when he divests himself of the illusions of mortal mind and becomes at-one with God.

"Man's origin is not material, but spiritual. The universe is not the result of physical propulsion, but is an evolution from the Infinite Mind. God is Spirit, Truth. As matter is the opposite of spirit, truth, so must it be the opposite of God. Matter is the subjective state of error, deflecting from everlasting uprightness and eventuating in false personal beliefs, in sickness and death, only to be overcome by conquering truth—eradicated not by drugs or hygienic rules—that is, laws of matter—but by the power of Mind. Jesus referred to original evil, which he cast out in healing the sick, and called it 'the devil and a liar from the beginning.'

"Jesus's mission was not for a period, but touched universal humanity. Hence his promise,

* This statement of belief is protected by Mrs. Eddy's copyright, and is used here by special permission.

'Verily, verily, I say unto you, he that believeth in me, the works that I do shall he do also; and greater works than these shall he do.' And, 'these signs shall follow them that believe,' the word *them* instead of *you* clearly making this assurance applicable to Christians in all ages. Jesus's atonement for sin was a human sacrifice, which demonstrated man's life in God, divine Good; and this verity, when understood, is the way of salvation, for it destroys sin. (See Romans xii, 1.) This theory is corroborated by Jesus's supremacy over all phases of matter—a control not supernatural, but divinely natural in one abiding in God, Good, the center and circumference of the universe. From this it follows that genuine healing must be wrought upon thought, not body.

"When following these leadings of scientific revelation, the Bible was the writer's only textbook. When apparently near death, her convictions laid hold upon the sublime verity that all evil, whether moral or physical, must be nonexistent, because contrary to the omnipotent Good, God. She found in the Bible a new meaning, whereby she was snatched from the valley of shadows and her feet set on the rock. As it was through the understanding of God through Christ, God's idea, all healing must come, she adopted Christian Science as the name of this curative system."

It was a spinal injury which medical science deemed incurable in the case of Mrs. Eddy, and several persons still living attest to it. The same year that she regained health (1866) she began healing others, and also taught her first pupil. Science and Health was written while she lived at her home in Lynn, Mass. On July 4, 1879, The First Church of Christ, Scientist, was founded in Boston, with 26 members and Mrs. Eddy as its pastor, though she did not receive ordination till 1881. For several years this congregation met in a hall, gradually increasing, though not with the giant strides it has attained of late. In the same year Mrs. Eddy founded her metaphysical college at Boston, the laws then enabling her to obtain a charter for medical instruction, a privilege which was withdrawn after 1883. Mrs. Eddy has been from the beginning president of this college. Under its auspices a yearly course of instruction is given to a limited number of applicants, with a view to fitting them for authorized teaching. A class in obstetrics is also instructed yearly under the auspices of this college by a duly appointed Christian Scientist, formerly a medical practitioner of experience and standing, who now teaches and practices only Christian Science mind-healing and its obstetrical system. In 1883 she established the Christian Science Journal, becoming its editor and proprietor. It still remains the official organ of the society. A weekly publication called The Sentinel was established in 1898.

Christian Science was introduced to New York in 1886, the first national association convening there on March 11. The same year a denominational chapel was begun at Oconto, Wis., and others soon followed elsewhere. Christian Scientists never dedicate a church until it is paid for, and not until January, 1895, was the first imposing edifice, known as the Mother Church at Boston, dedicated as a testimonial to Mrs. Eddy. It was paid for by her followers throughout the world, and it cost, including land, nearly \$250,000.

The church that began with 26 members had at its dedication 5,000, with a local attendance of about 800. At the present date its total general membership is more than 20,000. In 1894 there were in the United States 300 Christian Science societies meeting regularly for worship, 26 teaching institutes, and 66 dispensaries and reading

rooms. At the present writing (November, 1900) there are in the United States and other countries all told, 441 chartered churches, and of societies organized but not yet chartered 134, making a total of 575. Of reading rooms there are 284, and of institutes 75. The total number of professional Christian Scientists is officially estimated 1,000,000 to 1,250,000. The headquarters of the movement are in Boston. Chicago comes next New York third. There are now 8 congregations worshipping in Manhattan. Philadelphia has churches. Kansas City ranks next in active growth, then Denver and Buffalo. In the Western States the sect has grown rapidly, and it is making headway in the South, even as far as Texas. Salt Lake City is a thriving center. A church has been begun at Dawson, Alaska. Next to the United States the sect has grown most in Canada and Australia. It has obtained foothold in England, Scotland, Germany, Sweden, Norway, France and Italy. It has begun work in Hawaii, South Africa, and Japan, and of late in China, where Mrs. Conger, wife of the United States minister, has been an indefatigable worker in its behalf.

All the literature of the Christian Science board is published at one place, 95 Falmouth Street, Boston. Besides the Christian Science Journal (monthly) and The Sentinel (weekly), tracts, pamphlets, hymnals, Bible lessons, etc., are issued. The other published works of Mrs. Eddy include Christmas and Christmas, a poem; Retrospection and Introspection, Pulpit and Press, Unity of God, Rudimentary Divine Science, Christian Science and Pantheism, Message to the Mother Church, No and Yes, Christian Healing, People's Idea of God, Miscellaneous Writings.

All churches rank as branches of the Mother Church in Boston and, although independent in the conduct of their own affairs, accept of the tenets of the Mother Church. Properly speaking, the church has no ministers. Each congregation has two readers, first and second, a woman and a man, and these read the lessons and conduct worship. This claims to be a revival of an ancient custom in the Christian Church. Every Wednesday evening all churches throughout the world hold meetings at the same hour. At the meetings personal experiences and observations are related by members of the congregation, and the manner of cures witnessed are told.

In 1898 the Christian Science Board of Education, with headquarters in Boston, was established, also the Board of Lectureship of the Mother Church, composed of official lecturers who reside in different parts of the United States.

The Mother Church has also a Publication Committee, composed of a man who attends to the press work of the movement, especially the correction of false statements and erroneous views pertaining to Christian Science. Duly appointed persons throughout the world co-operate with the committee and look after the presentation of Christian Science in the press.

To quote from a lately published article by a member of the Christian Science Board of Lectureship of New York, "the cardinal reasons given for the rapid growth of Christian Science are, first, the restoration of the Christian healing of the apostolic church; second, the establishment of Christianity on a scientific and practically demonstrable basis; third, the metaphysical and spiritual interpretation of Christ's teaching, representing general and world-wide reaction against materialism and externalism in religion. Christian Science stands pre-eminently for the religion which heals the sick, reforms the sinner, demonstrates the naturalness of divine science, and unites in or

threefold system of science, theology, and medicine the divine way taught and demonstrated by the founder of the Christian religion, and practiced by his followers during the first three centuries." (See METAPHYSICS, in this volume.)

COLOMBIA, a republic in South America. The legislative power is vested in the Congress, consisting of a Senate of 27 members, 3 from each department, and a House of Representatives containing 66 members, 1 to 50,000 inhabitants, elected by adult male suffrage on collective tickets for the different departments. The President is elected by electoral colleges for six years. If the presidency and vice-presidency become vacant, the Congress elects an acting President for the remainder of the term. Since the abolition of state sovereignty in 1886, the President has power to appoint and remove governors, but the departments into which the former states were converted still collect and expend their separate revenues. The President elected for the term beginning Aug. 7, 1898, was M. A. Sanclemente, and the

enue of \$225,000 a year from the Panama Railroad concession, which in 1880 was paid up in advance till 1908. The internal debt in 1899 amounted to 11,359,074 pesos, of which 5,725,358 pesos were floating obligations and 5,633,716 pesos consolidated debt, requiring 353,300 pesos a year for the payment of interest, while for the payment of interest and principal on the floating debt the fund of 1,738,000 pesos is set aside. The paper money in circulation in 1899 was 30,984,022 pesos in amount. A law was made in 1894 to establish the gold basis, permitting the free coinage of gold. Silver has been issued in subsidiary coins to the amount of 3,000,000 pesos, but no gold has been coined. More paper currency was subsequently issued until the premium on gold rose in April, 1900, to 550 per cent. The foreign debt, held mainly in England, amounted with arrears of interest to £3,514,442 sterling, when an arrangement was made in January, 1897, to take it up by the issue of £2,700,000 of new bonds which pay only 1½ per cent. interest till 1900, 2 per cent. then



COLON.

Vice-President was J. M. Maroquin. The Cabinet at the beginning of 1900 was composed as follows: Minister of the Interior, F. Palacio; Minister of Foreign Affairs, G. C. Cuerva Marquez; Minister of Commerce and Communications, Carlos Calderos; Minister of Public Instruction, M. F. Suarez.

Area and Population.—The republic has an estimated area of 513,938 square miles. The population is supposed to reach 4,000,000, including 150,000 uncivilized Indians. The capital, Bogotá, situated on a lofty plateau, has about 120,000 inhabitants; Barranquilla, on the Magdalena river, connected by 20 miles of railroad with the coast, has 40,000; the mining town of Medellin, 40,000; the seaport Panama, 30,000; Bucaramanga, a coffee market, 20,000; the seaport Cartagena, 20,000. There is a boundary dispute with Costa Rica which has been referred to the President of the French Republic for arbitration. The boundary between Colombia and Brazil has not been settled. The boundaries with Peru and Ecuador by a convention of 1894 were referred to the Queen Regent of Spain.

Finances.—The Congress votes supplies for two years. For the biennial period 1897-'98 the revenue was 37,461,000 paper pesos, and the expenditure 41,429,180 pesos. Gold was worth 310 premium. For 1899-1900 the revenue was placed in the revised estimate at 29,918,640 pesos, of which customs duties provide 21,453,640 pesos. The estimate of expenditure balanced the revenue, the chief items being 2,524,848 pesos for military affairs, 4,493,900 pesos for justice, 3,773,500 pesos for debt charges, and 3,731,500 pesos for financial administration. The Government receives a rev-

till 1903, 2½ per cent. till 1906, and 3 per cent. thereafter. The revenues of the nine departments in 1899 amounted to 16,986,756 pesos in currency, and their expenditures to 17,346,040 pesos. The peace strength of the army was fixed by the law of 1898 at 1,000 men. In war time the President has authority to call the entire male population to arms. The naval force of the republic consists of a river gunboat, a small armed steamer, and a sailing vessel.

Commerce and Production.—The value of imports in 1898 was 11,083,028 gold pesos and of exports 19,157,788 gold pesos. The chief imports were cotton goods, metals and hardware, kerosene oil, foodstuffs, wine and beer, linen goods, chemicals, and paper. The export of coffee was 39,100,102 kilogrammes; of tobacco, 6,216,740 kilogrammes; of rubber, 410,423 kilogrammes; of hides and skins, 4,675,395 kilogrammes. Other exports are dyes, cinchona bark, copaiba, cabinet woods, various foodstuffs and vegetable products, live animals, gold, silver, cinnabar, emeralds, manganese, and other metals and mineral products. The gold and silver production is \$4,100,000 a year in value, and is increasing. Lack of transportation prevents the more rapid development of mines of copper, lead, and other ores, and of the rich agricultural resources of the country, while the valuable forest products are diminishing under wasteful methods of exploitation. Coal and iron are mined and some iron is manufactured. The Government salt mines near Bogotá yield the value of 680,000 pesos a year.

Navigation.—The number of vessels entered at the port of Barranquilla in 1898 was 266, of

441,673 tons; cleared, 263, of 442,777 tons. In 1897 were entered at Panama, Colon, Cartagena, and Santa Maria 923 vessels, of 1,213,110 tons; cleared, 910, of 1,210,629 tons. British, German, French, Spanish, and Italian steamers visit these ports, and American lines connect them with the Gulf and Atlantic ports of the United States. The merchant marine of Colombia in 1898 consisted of 1 steamer, of 457 tons, and 7 sailing vessels, of 1,770 tons. On the Magdalena and its tributaries, affording 1,000 miles of inland navigation, are 42 steamers, of 7,331 tons.

Railroads, Posts, and Telegraphs.—There are 11 lines of railroad, two owned by departments and the rest by companies, which had 389 miles completed, 270 miles under construction, and 85 miles contracted for in 1898.

The post office in 1897 carried 2,794,069 letters and postal cards, 1,233,313 papers and pamphlets, and 161,217 packets.

The telegraphs in 1898 had a total length of 8,600 miles.

The Panama Canal.—A company for the construction of a canal across the isthmus of Panama was formed in 1881 by Ferdinand de Lesseps. After 772,545,000 francs had been raised and expended, about half the amount that it was then estimated that the canal would cost, the company went into liquidation in 1889, having failed in the attempt to obtain a popular loan of 600,000,000 francs. The work was then suspended. In 1893 the Colombian Government gave an extension of the time limit to enable a new company to be formed, and in 1894 a company was formed and work was provisionally resumed and has since been carried on with more or less expedition. An American company was organized in 1899 to complete the canal, which it was estimated by the French engineers could be done in ten years at a cost of 512,000,000 francs in addition to what had been expended. Of the \$150,400,000 expended by the original company it was found that only \$88,600,000 had been legitimately expended for excavation and construction, the rest having gone to politicians, newspapers, and dishonest promoters and contractors, creating a financial scandal in France which was the greater because the bulk of the subscriptions had come from small investors and the work had been undertaken as a patriotic enterprise. The new French company was started with a capital of 65,000,000 francs, about half of which was cautiously expended on construction in four years, during which attempts were made in vain to induce the French public to invest the funds needed for the completion of the work, not as a tidewater canal, which was the original plan, but with locks. In 1898 an auxiliary company known as the Panama Company of America was organized in the United States. Congress authorized a new commission to examine the American isthmus at every available point in order to determine the most practicable and feasible route for a ship canal. President McKinley appointed this commission in June, 1899, consisting of Rear-Admiral Walker, Colonels Ernst and Hain of the engineer corps of the United States army, and five civil engineers, who first went to Paris to study the plans of the Panama Company before examining the route and the work done on the spot, the route chosen for the Nicaragua Canal, and other available routes. The directors of the new French company, despairing of raising sufficient capital in France, voted to transfer all its property, its rights, and its powers, with those of the auxiliary American company, to a new company that was organized under the laws of the State of New Jersey, which

undertook to complete the canal with American capital. The Panama Canal Company of America was incorporated on Dec. 27, 1899, for the purpose of acquiring the rights and property of the French Panama Company in the maritime canal across the isthmus and the Panama Railway, which was to pass into its possession upon the completion of the canal. It obtained powers also to operate ships and steamer lines, to carry mails, passengers, and merchandise, to construct wharves, warehouses, and telegraph and telephone lines, and to enter into such arrangements with foreign governments as may conduce to its objects and assist in obtaining rights, grants, and privileges. The capital was fixed at \$30,000,000 in the beginning, with power to increase. The arrangement with the new French company was to pay shareholders partly in money, but mainly in shares of the American company. The original French company retains only an equity in the shape of a percentage of the profits remaining after the payment of all operating expenses and fixed charges and a dividend to the stockholders of the new company. They will receive 60 per cent of these surplus net earnings. The capital for the completion of the canal, \$100,000,000 or over, was expected to be raised by the issue of bonds. An international commission made up of French, German, Russian, English, and American engineers, whom the French company consulted in drawing up its plans, estimated the cost of completing the entire canal at something over \$102,000,000, if the two locks are made of a certain width. \$125,000,000 with wider locks. The extended concession from the Colombian Government runs until Oct. 31, 1910, a bonus of 3,000,000 francs having been paid to the Government to obtain the extension. After the American company was incorporated and the proposition was definitely brought before the French directors, so much opposition was developed to the surrender of an enterprise that had absorbed so much French enthusiasm and entailed such sacrifices on the French people that the directors were unwilling to shoulder the responsibility of carrying out the arrangement, and they all resigned. The trustees of the De Lesseps company in particular were reluctant to sanction the total transfer of the entire management and control from France to America. A new board of directors was chosen on Dec. 1, 1900, which continued negotiations with the American company. The prospects of the latter depended upon the report of Admiral Walker's commission giving the preference to the Panama over the Nicaragua route, and the commission in its consideration of the Panama route had to be guided in a large degree by the knowledge whether the French shareholders would transfer full control to the American company. The commission made a careful examination of the work already executed or in progress at Panama in March, 1900, and requested explicit information regarding the guarantees to be offered to the American nation as to the transfer of all rights, powers, property, and management to an American company. Work was going on in various places, especially with 3,000 workmen in the great Culebra cutting, which before July was brought down to within 45 meters of the level of the sea.

Rebellion.—President Sanclemente died in January, 1900, leaving a precarious and complicated political situation. In April a revolution was started by the Liberal party under Gen. Gabriel Vargas Santos, who was proclaimed provisional President of Santander, the chief of the growing department. The rebels besieged Bucaramanga from May 11 to May 25, when they

about 6,000 men, besides 2,000 guarding different points, while the Government forces were said to number 15,000. They fought daily with determination on both sides until the losses mounted up to several hundred killed and wounded and both parties used up their ammunition. The rebels then withdrew, and during the following month made themselves masters of the greater part of the department. Their provisional Government was established at Cucuta. They received countenance and aid in men and money from Venezuelans and Nicaraguans. The Government assumed that all foreigners favored the revolution, including Protestant missionaries, who were harshly treated in consequence. An expedition of 300 men on a Nicaraguan gunboat, which the Nicaraguan authorities represented they had stolen, landed at Chiriqui and took possession of the town, killing the garrison of 25 men, and putting to flight the citizens who opposed them or were afraid. Benjamin Ruiz, Governor of the Venezuelan state of Zulia, aided the Colombian rebels because he hoped if they got into power they could repay him by relinquishing the whole or a part of the Colombian claims to the territory in dispute between the two republics. Besides the Comotombo, which went to Chiriqui flying the Nicaraguan flag, the rebels obtained possession of the Nicaraguan steamer Rayo. The American steamer Hanaberg, chartered as a transport by the Colombian Government, was seized by the revolutionists, who had two other small steamers with which they captured San Antero, Loricá, and other places on the Sinu river. When guerrilla bands appeared in the department of Bolívar the military at Cartagena placed guns at the entrance of the port and on the heights. The bands united with those operating in Magdalena until they formed under Gen. Ruiz a force as formidable as the Government troops pitted against them. Another filibustering expedition landed on the west coast and proceeded to David, near the border of Costa Rica. Cartagena was captured by the rebels early in July, giving them command of nearly the entire Caribbean coast and the rivers, except the Magdalena, leading to Bogotá, at the entrance to which Barranquilla still held out after long and severe fighting. The warfare was most disastrous to the country, causing a stoppage of all business and production in the districts where the fighting occurred, and seriously affecting the central and southern departments as well. The Government summoned to arms every male between the ages of twelve and sixty. Live stock, arms, saddlery, and whatever else was required by the army was requisitioned without payment, and the lawless soldiers and revolutionists often took away the food, utensils, and clothing of families. When the revolutionists advanced against Panama they were well disciplined and were already numerically superior to the Government forces opposed to them. Their supplies and munitions, however, were running short after two months of constant hard campaigning. The gunboats Peranzonzo and Augusto were taken by Gen. Francisco Ruiz to La Guayra, and there they were seized by the Venezuelan authorities in the belief that their commander, a veteran revolutionist, intended to use them in a rising against President Castro. The rebels had gunboats which could co-operate in the attack upon Panama. The United States Government protested against a bombardment of Panama, ordering a man-of-war to that port to interfere. A British war vessel was in the harbor, and marines were landed to protect property. The warning from the United States was ineffective. The Government forces went out to

meet the rebels when they appeared, under Gen. Emilio Herrera, 1,500 strong, at Corozal, on July 20, but after several hours of sharp fighting fell back toward Panama. The battle was resumed on the next day and the following, and still went against the Government troops, whose commander, Gen. Belisario Lozada, took refuge on the British gunboat, willing to give up the contest. A truce was arranged for a day, at the end of which the Government party decided to fight it out. Gen. Carlos Alban, the governor, then took charge of the defense, and fought the rebels in the streets of Panama and outside. The battle proceeded from day to day, and the landing of reinforcements for the rebels turned the tide still more in their favor. Both parties, although they used artillery freely, refrained from injuring the city or interfering in any way with the traffic of the Panama Railroad. On July 25 the commanders agreed to an armistice, which was extended through the efforts of the American and British consuls so as to allow the burial of the dead and care for the wounded, the number killed having exceeded 600. The fighting on both sides was of the most resolute description, especially on the part of the rebels, who tried to carry by assault a strongly intrenched position defended with Mauser rifles. Many hundreds were wounded, the Liberals having been the greatest sufferers. Nearly a quarter of the people engaged on both sides were killed or wounded. The trenches were full of dead, and the wounded had crawled into houses, and many had died for want of surgical attention. Both parties were supplied with arms of the most modern patterns. The armistice served the further purpose of allowing 1,000 fresh Government troops to arrive from Savanilla. As soon as these came over the railroad the Liberals were willing to make peace, agreeing to give up all their arms, ammunition, and ships on condition of receiving a complete amnesty, the officers to retain their side arms, the insurgents to be allowed to return to their homes, and all political prisoners to be set free. On the previous day a Government force led by Gen. Gonzalez Valencia took Cúcuta, held by Colombian rebels and Venezuelans who had come to their aid, capturing many prisoners and a large quantity of war material. The foreigners who took part in the rebellion were expelled from the country.

When the Congress met, Vice-President Maroquin was intrusted with the executive power and a new Cabinet was formed on Aug. 10, composed as follows: Minister of Government and of War, Gen. Guillermo Quintero Calderon; Minister of the Interior, Dr. Pedro Antonio Molina; Minister of Public Instruction, Dr. Miguel Abadía Mendez; Minister of Finance, Alejandro Gutiérrez; Minister of Foreign Affairs, Dr. Carlos Martínez Silma.

COLORADO, a Western State, admitted to the Union Aug. 1, 1876; area, 103,969 square miles. The population was 194,327 in 1880; 412,198 in 1890; and 539,700 in 1900. Capital, Denver.

Government.—The following were the State officers in 1900: Governor, Charles S. Thomas, Democrat; Lieutenant Governor, Francis Carney, Populist; Secretary of State, E. F. Beckwith, Populist; Treasurer, John F. Fesler, Republican; Auditor, George W. Temple, Republican; Adjutant General, J. C. Overmeyer, Democrat; Attorney-General, D. M. Campbell, Republican; Superintendent of Education, Helen L. Grenfell, Republican; Commissioner of Mines, Harry A. Lee; Regents of the University, W. E. Anderson, C. R. Dudley, O. J. Pfeiffer, William J. Orange, D. M. Richards, Harold Thompson; Chief Justice of

the Supreme Court, John Campbell, Republican; Associate Justices, Luther M. Goddard and William H. Gabbert, Democrats; President Judge of the Court of Appeals, Charles I. Thompson; Associate Justices, Julius B. Bissell and Adair Wilson.

Population.—A small part of the increase in the past decade is due to the fact that there were 985 Indians and 66 other persons on Indian reservations, etc., who were specially enumerated in 1890, but were not included in the returns at that census with the general population. This year's census shows nearly 16 times as many inhabitants as that of 1860, the first year reported. In 1870 the population was 39,864. About one quarter of the counties show each a small decrease: it is believed that all these have been gaining since the panic, but have not fully recovered from the losses of that time. The population of Denver is 133,859.

Finances.—The financial condition of the State was described at length in the Annual Cyclopædia for 1899, page 167. The revenues are not sufficient to pay the current expenses, owing to the legal limit to the rate of taxation and the low valuations. Appropriations made by the Legislature amount to about \$500,000 more than the income, according to report. The Legislature of 1897 made the following order for the use of the revenues:

1. Expenses of legislative, executive, and judicial departments, and interest on public debt.
2. Appropriations for penal and reformatory institutions.
3. Appropriations for educational and charitable institutions.
4. Appropriations for other officers, bureaus, and boards.
5. Miscellaneous appropriations.

"If the revenues of the State are divided between the first and second classes, as they must necessarily be by a strict adherence to the law, it means bankruptcy for the institutions contained in the third, fourth, and fifth classes."

Education.—The school census of 1899 showed 143,335 children of school age, that of 1900 gave 153,634. This indicates an enrollment of over 118,000.

The State Normal School, at Greeley, graduated a class of 69, May 31.

There were 425 students at the State University, at Boulder, in February, not including 360 who were in the preparatory school. The university opened Sept. 10 for its twenty-third session with large classes. The \$70,000 loan by citizens of Colorado last spring has made possible the continuance of the university's work and enabled President Baker to throw open the doors of the institution to several hundred students.

Colorado College, at Colorado Springs, has the promise of \$50,000 for an endowment fund for a science department, on condition that \$60,000 be raised in addition for a building.

The State School of Mines, at Golden, opened Sept. 16 with a large attendance, 203 having applied for entrance to the freshmen class. A gift of \$25,000 from W. S. Stratton will be used for new buildings and improvements to old ones. An assay building is under way and will be ready about Feb. 1. It will contain 28 furnaces, accommodating 56 students; the building is large enough to admit 50 furnaces.

A new thing in education has been organized this year, the "National Rough Riders' Military Encampment," in the Shenandoah valley, on a tract of 100,000 acres, 400 miles southeast of Denver. Gen. E. V. Sumner was chosen as the military head of the school, with Lieut. E. S. Farrow in charge of the instruction.

Concerning the plan and scope of the new enterprise, Lieut. Farrow said: "The plan has already met with such popular approval that the Governor is actually overrun with applications from young men wishing to take the training. Many of the applications come from students of Yale and Harvard, who are to graduate this year. Fifty applications have already been received from England.

"Young men between seventeen and twenty-five years of age will be permitted to join by regular enlistment. They will be sworn to serve one year during which time they will receive practical training in rough riding, scouting, reading signs, training, and all the arts of up-to-date warfare. For this each applicant will have to pay a tuition fee of \$500, which covers his expenses for the entire year, including equipment, horse, clothing, and rations. Each applicant must also pass the United States army examination before entering the encampment for instruction."

A garden school undertaken last year at Pueblo as an experiment has proved so successful that it is to be continued indefinitely. Each pupil has a plot of his own and an interest in certain common beds. The children did all the work under instruction. During the latter part of the term the gardens added much to their luncheons and social sales were made, in the profits of which all shared.

Corrections.—There were 533 prisoners enrolled in the Penitentiary, at Cañon City, March, and 163 inmates at the State Industrial School for boys, at Goshen.

State Lands.—The annual report of the State Land Board shows the total receipts of the office to have been \$204,096; the number of acres of school lands sold, 2,000; internal improvement lands sold, 1,258.25 acres; total, 3,258.25 acres; area under renewal certificates, 3,317.26; total area patented, 18,323.21; town lots sold, 21. Of the money received, \$38,577 goes to the permanent school fund, \$14,004 to the permanent fund of the Agricultural College, and \$5,695 to the income of the college. The permanent internal improvement fund receives \$22,302, and the income for internal improvement \$29,307.

United States Lands.—The report of the General Land Office for the year ending June 30, 1900, shows the railroad grants in the several States which include 35,030 acres in Colorado to the Union Pacific. Colorado had 646 mineral and mill-site patents and 1,187 mineral or mill-site claims, covering 10,528 acres. There was a tract of 99,488 acres in Colorado embraced in Indian patents.

Products.—Following are the figures of the State's mineral production in 1899, as reported by the Director of the Mint: Gold, \$26,265,487; silver coinage value, \$29,679,706; lead, \$6,051,156; copper, \$1,975,518; total, \$63,971,867. Other products have been estimated as follow: Zinc and manganese iron, \$557,500; stone and marble, \$1,820,000; iron and steel, \$7,681,719; coal, \$8,750,000; lumber, \$3,350,000; oil, \$1,500,000; live stock and their products, \$11,650,000; farm and dairy products, \$28,112,668.

An estimate of the beet-sugar production in 1900 placed the value of the output of the factories at \$2,000,000, of which about half would go to the beet growers.

In the spring more than 531,000 trout were put into the streams of the State from the hatchery at Gunnison.

The number of sheep in the State this year given as 2,185,327, and their value \$6,250,036. Wool 14,204,625 pounds were produced, the value of which was \$1,633,322.

The number of horses, as estimated by officials, is 157,427; of swine, 29,460; of mules, 9,118; cattle, 1,200,421.

The increase in the number of cattle since 1890 is 572,560, or over 79 per cent. The sheep increase is also remarkable. From the estimates made in 1900 and the census figures of ten years ago there has been an increase of 1,667,337 in number, or 232 per cent., and yet the highest price was paid for Colorado lambs this year that ever has been recorded.

The report of the State Board of Horticulture says that 733 varieties of fruit are grown in the state, there being 225 varieties of apples alone. The prices received for fruit in 1899 were higher than ever, and contracting agents from every large eastern city were here last year to secure the products of the Colorado orchards.

At present quail are distributed through the state as trout and other fish are given out for the teams. The explanation is given as follows: In several of the counties on the western slope the quails have become so numerous that the citizens have petitioned the Fish and Game Commissioner to do something for them. There is no open season for hunting quails in Colorado, and they have become so thick that they destroy stocks of small grain and in some instances have become so bold that chickens have been driven from their food in the farmyard and the stuff appropriated by the quails. The only method the little birds accomplished was to destroy grasshoppers, and in this work there was nothing that could equal them. In other sections of the state there was an abundance of grasshoppers, but no quail." The Game Commissioner therefore offered a reasonable price for live quails, to be distributed to farmers applying for them.

Complaint is made that the mule deer, which formerly roamed over the plains in vast herds, is threatened with speedy extinction. This is attributed to the unskilled and cruel work of amateur sportsmen, and to the greed of settlers, who feed upon venison, though all the time raising the best of cattle for the market. It is even said that there are children fifteen years old in these cattle districts who never have tasted beef.

A local paper says: "The plains country in eastern Colorado, which was once the breeding ground and home of thousands of buffalo, is now populated by thousands of coyotes, and so destructive have they become to the stock interests the section in question that the State of Colorado and the cattle barons, working together, are offering \$37.50 for every coyote scalp presented."

The New Capitol.—It was announced in October that the Capitol was complete. The site was given to the State by Henry C. Brown. Construction work was begun in 1886; the corner stone was laid July 4, 1890; the whole cost was about \$1,000,000. It is of Colorado granite. The distance around the outside walls is a quarter of a mile; the height from the base line to the top of the statue on the dome is 256 feet. From the dome can be seen the Rocky mountains for a stretch of 100 miles; on a clear day Pike's Peak, Long's Peak, and Gray's Peak are distinctly seen.

Lawlessness.—A dispatch from Cañon City, under date of Jan. 27, said that Thomas Reynolds, a convict, who, with three others, escaped from the Penitentiary after murdering Night-Captain William C. Rooney, was captured near Florence, 100 miles east of Cañon City, and brought to the same place in a wagon, where he was taken from the officers by a mob and hanged to a telegraph pole.

In May a negro was hanged by a mob at Pueblo for assaulting and murdering two little girls. His dead body was dragged through the streets, followed by a mob of about 3,000 persons.

Most horrible was the fate of a negro boy, Preston Porter, who assaulted and murdered a girl of eleven on her way home from school at Limon, Nov. 8. He was taken to the spot where the crime was committed, chained to a stake, and burned to death. The father of the little girl applied the match. The Governor has ordered an investigation.

Political.—State officers were elected in November. The Democrats, Populists, and Silver Republicans united on a fusion ticket. Following were the nominees: For Governor, James B. Orman; Lieutenant Governor, D. C. Coates; Secretary of State, D. A. Mills; Treasurer, J. N. Chipley; Auditor, C. W. Crouter; Attorney-General, C. C. Post; Judge of the Supreme Court, R. W. Steele; Superintendent of Public Instruction, Helen L. Grenfell; Regents, W. H. Bryant, F. E. Kendrick.

The Republican ticket was: For Governor, F. C. Goudy; Lieutenant Governor, P. S. Rider; Treasurer, O. Adams, Jr.; Auditor, J. S. Murphy; Secretary of State, J. W. Milsom; Attorney-General, R. T. Yeaman; Judge of the Supreme Court, G. C. Bartels; Superintendent of Instruction, Ione T. Hanna; Regents, C. R. Dudley, W. A. Packard.

The Prohibitionists named the following: For Governor, J. R. Wiley; Lieutenant Governor, T. C. Chamberlain; Secretary of State, Mary L. Henderson; Treasurer, W. H. McClure; Auditor, Joseph Harvey; Attorney-General, James Miller; Supreme Judge, F. I. Willsea; Superintendent of Instruction, Elizabeth Smith; Regents, B. D. Sanborn, W. E. Tetzel.

The trades unions nominated a ticket through the process of the initiative and referendum, but the State Federation of Labor voted to abandon it.

The official vote of the State was as follows: For President: Bryan, 122,733; McKinley, 93,072. For Governor: Orman, 121,995; Goudy, 93,245. The entire fusion ticket was successful.

A proposed amendment to the Constitution was voted upon and appears to have been carried. The effect is to permit the Legislature to propose as many as six amendments at one session; heretofore it has been limited to one at a session.

CONGO, INDEPENDENT STATE OF THE, a sovereign, monarchical, neutral, and independent State, created out of the Congo International Association, which was founded by the King of the Belgians in 1883, and whose sovereignty was recognized by the United States and the principal European powers before the signature of the general act of Berlin. The Berlin Conference was summoned by Prince Bismarck in November, 1884, with the object of regulating the African question, and its conclusions were embodied in a general act, dated Feb. 26, 1885. Subsequent negotiations resulting in treaties with France and Portugal gave the State its present boundaries. At the end of April, 1885, the Belgian Chambers passed resolutions authorizing Leopold II, King of the Belgians, to be the chief of the State founded in Africa by the Congo International Association. The union between Belgium and the Congo State was to be exclusively personal, and King Leopold was and is King of the Belgians and sovereign of the Congo State. In April, 1887, the King obtained from the French Government the waiving in favor of Belgium of its right of pre-emption conceded by the Congo Association in April, 1884, and thus secured for his own country the undisturbed reversion to the colony he had created in Central Africa. On

Aug. 2, 1889, the King made his will as sovereign of the Congo State, bequeathing to Belgium all his sovereign rights therein. In July, 1890, a convention was signed between Belgium and the Congo State, giving the former the right to annex the latter, if it judge good, within a period which expires in January, 1901.

The seat of the central Government is at Brussels, and a Secretary of State, Baron Edmond van Eetvelde, directs the administration with the assistance of secretaries in the different departments, that of Foreign Affairs being under the Chevalier A. de Cuvelier. Boma is the seat of the local Government, which is generally represented by a Governor General *ad interim*, at present Major E. Wangermee.

Area and Population.—The area of the Congo State is about 900,000 square miles, and the population probably not far short of 30,000,000. The population was diminished formerly by incessant slave raids and intertribal strife. These causes of depopulation have either wholly disappeared or greatly lessened in their effect, and a steady increase in the number of the blacks is anticipated. A census of the white population, taken on Jan. 1, 1899, shows that there were 1,630 Europeans and Americans, of whom 959 were Belgians, 129 Portuguese, 113 Italians, 94 English, 81 Swedes, 65 Dutch, 41 Danes, 29 French, 28 Americans, 21 Germans, 18 Swiss, 8 Austrians, and 3 Spaniards. The table of mortality among the State agents alone shows a death rate in 1892, the worst year, of 9 per cent. from all causes, of 7.3 per cent. from sickness—that is, excluding those killed on warlike expeditions. In 1897 the rates were respectively 6, 8, and 5.4 per cent. Steps to improve hygienic conditions are in progress. Certain parts of the Congo region are trying for Europeans, especially for those who have newly arrived; on the other hand, there are extensive provinces—Katanga, for example—in which the climate can not be surpassed.

Finances.—The financial position and progress of the Congo State are revealed by a comparison of the successive budgets, amounts being given in francs:

YEAR.	Revenue.	Expenditure.
1895	6,004,764	7,370,999
1896	7,002,735	8,286,800
1897	9,369,800	10,141,871
1898	14,765,050	17,251,975
1899	19,960,500	19,672,965

In the revenue is included the personal grant from King Leopold of 1,000,000 francs, and the advance from the Belgian Government of 2,000,000 francs; but the proportion of State receipts to expenditure, which had risen from less than 5 per cent. in 1886 to over 68 per cent. in 1897, shows a further increase to more than 86 per cent. An absolute equilibrium without extraneous grants is expected to be attained in 1901. The principal items in the revenue for 1899 are customs, 3,700,000 francs; transport service, 1,200,000 francs; and produce of the domain, in the form of native tribute and taxes, 10,200,000 francs. The largest amounts under the head of expenditure are the administration in Africa, 2,002,330 francs; the public force, 7,623,946 francs; the marine service, 1,481,624 francs; public works, 1,261,270 francs; agriculture, 600,530 francs; and development of the domain, 4,020,720 francs. In addition to the regular expenditure, the sum of 2,946,820 francs, provided for by loan, was spent on extraordinary public works, more than half of this total for the improvement of the means of

communication on the Upper Congo, and a grant of 500,000 francs was assigned to the telegraph from Lake Tanganyika to Boma. For 1900 the revenue was estimated at 26,256,500 francs. Of this 23,256,500 francs of local revenue, 11,200,000 francs come from the State domain, 4,680,000 francs from customs, 3,800,000 francs from transport, 2,950,000 francs from administration, and 626,500 francs from various sources. The total expenditures were estimated at 27,731,254 francs, of which 15,423,000 francs were allotted to Finance, 11,050,013 francs to the Interior, 158,000 francs to Foreign Affairs, and Justice, 110,360 francs to the central office, and 989,200 francs were calculated for contingencies.

Military Force.—The army of the State is known as the Congo public force. The International Association employed foreigners—Hausa and Zanzibaris—for its expeditions, but in 1891 the first national corps was raised in the form of a regiment of 8 companies, or 1,200 men. In July, 1891, the official scheme for the public force was promulgated. The troops were to consist of three separate bodies, the first, or regulars, voluntarily enlisted for a period of seven years—five in active service and two in the reserve—and the second, an enforced levy of militia by order of the Governor General. In 1897 the numbers had risen to 4,000 volunteers and 9,500 militiamen. The training of the men is carried out in fixed camps, and covers a period of eighteen months. The troops are armed with the Albini rifle and a short bayonet, while the white officers carry the Mauser with a magazine of five cartridges. Great care has been taken with the fire discipline of the troops. Recent events have suggested doubts as to the true worthiness of the force, but the adoption of precautions similar to those taken in the Anglo-Indian army may avert serious danger. The chief precautions are the employment of the natives at a distance from their tribal homes, and the mixing of the tribes in the composition of each battalion. The principal stations are generally defended by a rampart and ditch, but two regular forts, Chinkakassa and Kinshassa, guard the river Congo below Boma and Leopoldville respectively.

Justice and Treatment of the Natives.—In the earlier years of the Congo State the administration of justice was not thoroughly organized. Throughout the greater part of the State military law was in force. The task which preceded every other was the settlement of the question whether the Arabs or the Europeans were to be supreme. The abolition of military law in the Upper Congo only became possible in 1897, and at the same time power was vested in the public prosecutor to summon Europeans guilty of some particularly grave offenses, such as murder, before the tribunals of the Lower Congo, even when such offenses were committed within the jurisdiction of the upper river tribunals. The Court of Appeal at Boma was strengthened by three councilors of different nationalities being substituted for one Belgian judge. The access to this Court of Appeal was made so simple and cheap that the blacks might be neither unaware as to how they should proceed nor unable to do so. As a final safeguard, the lower courts are enjoined to lodge an appeal on behalf of those accused against their own decisions. A commission for the protection of natives, international in its composition and with Protestant missionaries as well as Catholic among the members, was formed for the purpose of watching over the interests of the natives and preventing acts of tyranny. It has the right to notify to the judicial authorities and the Governor General all acts that are injurious to the natives or acts of violence of which they are the victims. Finally, the president of the

urt of Appeal is required to make periodical
 utions of inspection, with the view of ascertaining
 there are any abuses or grievances. In 1898,
 when a native proved that an official had requisitioned
 supplies from him by force, the Court of
 Appeal sentenced the offending official to a term
 of hard labor. On another occasion the Matadi
 Tribunal decided against the State in favor of some
 Kanibari petitioners, who claimed that they
 could be sent to their homes by sea instead of by
 land, as the authorities wished to do. With re-
 gard to the general treatment of the blacks, the
 State has done all it can by clear instructions and
 summary orders to prevent tyranny in any form.
 Delegations that it grants its officers or servants
 a commission or premium for the collection of
 ivory or caoutchouc are opposed to the truth. All
 public employees are forbidden to take gratuities
 or commissions, and are liable to immediate dis-
 missal on detection. If cruelty is perpetrated by
 the European agents of the different commercial
 companies, the ill treatment of natives by whomsoever
 committed is a penal offense under the code,
 and the commission for the protection of the na-
 tives has a free hand to put the machinery of the
 law in force. Cases of harshness and even of
 cruelty now and then occur. The climate and
 conditions under which the Europeans work are
 not conducive to sweetness of temper, and the
 negro is admitted by his friends to be lazy, im-
 provident, and inattentive. It will be long before
 the black races will take to work for its own sake
 and remain persistently at it without stimulus or
 coercion, but simply in their own permanent in-
 terests. The Brussels act of July, 1890, was very
 far in the obligations it imposed on all its signa-
 taries to exclude spirituous liquors from the in-
 terior of Africa and to guard the natives against
 the curse of drink, which would outweigh all the
 benefits from the introduction of civilization.
 King Leopold imposed the heaviest import duty
 on alcohol, and in the Upper Congo, where no prior
 rights had to be respected, he restricted the im-
 portation to non-Africans and limited the quan-
 tity that might be sold to any European. It was
 also forbidden to use alcohol as an article of barter
 with the natives. The sale and introduction of
 alcohol above a certain boundary on the Lower
 Congo was thus made subject to the authority of
 the Governor General. At first the boundary was
 the Inkisai stream, then it became the Kwilu, and
 finally it was fixed at the Mpozo, which may be
 regarded as signifying Matadi. The practical re-
 sult of these changes is that the Congo Railway
 has been placed outside the strip of coast territory
 within which alcohol can be imported by payment
 of the duty of 1s. a gallon. Alcohol forms only
 1 per cent. of the total imports of the state, and
 the three years ending Dec. 31, 1897, there was
 a diminution in the quantity imported of 25 per
 cent. Statements having been made that the abuse
 of alcohol was greatly increasing among the
 Europeans, a decree was issued on Oct. 15, 1898,
 prohibiting its import or sale throughout the whole
 of the State's territory.

Commerce and Production.—The trade of the
 Congo is steadily increasing, as is shown in the fol-
 lowing returns of the total exports: 1887, 7,667,969
 francs; 1888, 7,392,348 francs; 1891, 10,535,619
 francs; 1894, 11,031,704 francs; 1895, 12,135,656
 francs; 1896, 15,091,137 francs; 1897, 17,457,090
 francs; 1898, 25,396,706 francs. The principal arti-
 cles exported are caoutchouc, of which 8,311,900
 francs worth was exported in 1897; ivory during
 the same year, 4,916,480 francs; palm oil, 650,206
 francs; palm nuts, 1,098,879 francs. Several new
 products are beginning to make their appearance

on the schedule. Of these, coffee and cacao are
 the most promising, but the young plantations
 can not be productive to any great degree before
 1902. With the view of promoting this cultiva-
 tion, the State made the following arrangement
 with the recognized chiefs in the districts of Aru-
 wimi and Stanley Falls. They were required to
 cultivate either coffee or cacao on their waste
 lands. The Government provided the necessary
 seeds, and promised a reward for each shrub on its
 attaining two feet in height. The chiefs are also
 to receive as their share 50 per cent. of the value
 of the coffee on the Belgian market. Nothing has
 yet been done toward developing the undoubted
 mineral resources of the country, but a large num-
 ber of companies, formed for the exploitation of
 the Congo region, promise an early movement in
 this direction. The special imports in 1898
 amounted to 23,084,447 francs, in which sum tis-
 sues and clothing stand for 6,246,981 francs, food
 substances for 6,246,981 francs, steamers and their
 machinery for 2,374,424 francs, other machinery
 for 1,928,586 francs, beverages for 1,579,989 francs,
 metals and hardware for 1,228,159 francs, and arms
 and ammunition for 872,533 francs. The special
 exports, or exports of produce of the State alone,
 in 1898 were valued at 22,163,482 francs, of which
 15,850,988 francs represent caoutchouc, 4,319,260
 francs ivory, 1,279,769 francs palm nuts, 660,870
 francs palm oil, 31,950 francs timber, 9,720 francs
 hides and skins, and 1,381 francs kola nuts.

Of the special imports in 1898, Belgium furnished
 15,468,565 francs' worth; Great Britain, 3,457,739
 francs; Germany, 1,669,164 francs; and the Neth-
 erlands, 1,015,986 francs. Of the special exports,
 the value of 19,329,387 francs went to Belgium,
 1,305,619 francs to Portuguese possessions in Africa,
 738,091 francs to the Netherlands, and 298,872
 francs to Great Britain.

Railways, Steamers, and Telegraphs.—Ow-
 ing to the existence of cataracts below Stanley
 Pool, access to the main course of the Congo by
 water is impossible. At an early stage it was re-
 cognized that a railway was essential to supply this
 natural defect. In 1887, accordingly, the first steps
 were taken by the formation of a company for the
 construction of a railway from Matadi to Leopold-
 ville on Stanley Pool. The distance between those
 places is 260 miles, and the principal obstacle to be
 overcome was presented by the Pallaballa moun-
 tain, which lies at a little distance from Matadi.
 Four years were occupied in overcoming it, and
 during that period very pessimistic views were
 expressed as to the success of the line. Once the
 Pallaballa was left behind, however, the difficulties
 of the undertaking vanished, although a distance
 of not more than 26 miles had been traversed.
 The remaining 234 miles were completed at less
 cost and in a shorter time than the first section,
 so that the formal inauguration of the whole line
 was celebrated on July 6, 1898. The great ad-
 vantage of this railway is that it supersedes the
 slow and costly portage system in the district
 of the cataracts. Two days only are required for
 the transit where three weeks were necessary; and
 the material for railways in the interior and for
 the large steamers that are to navigate the river
 can now be easily and expeditiously forwarded.
 The terminus of the line is at Ndolo, near Leopold-
 ville, where quays and slips for repairing the river
 flotilla have been prepared. Several other railway
 lines are urgently needed in the interior to supple-
 ment and complete the natural communications
 provided by the great river and its tributaries.
 Of these, the projected railway in the Welle valley
 and that connecting the upper courses of the San-
 kuru, Lomami, and Lualaba are the most impor-

tant. A royal decree was issued in January, 1898, sanctioning a line of railway from a point to be determined on the Itimbiri through the Welle valley to another point on the Nile near Redjaf, and money was assigned for the necessary preliminary surveys.

Scarcely less important than the railway question is that of improving the means of communication by water, and in June, 1898, the sum of 6,000,000 francs was assigned for the purchase of steamers, tugs, etc., the improvement of the port of Ndolo, and other similar works. Among the new river boats are stern-wheelers of 150 to 250 tons, and light fast-steaming packet boats capable of carrying 12 passengers. One large steamer of 500 tons is specially designed for the conveyance of railway material. All these boats are sent in sections over the railway and put together on Stanley Pool.

Telegraphs have not been neglected, and during 1900 great progress was made with them. The line from Boma to Tanganyika, with branches to Redjaf on one side and Katanga on the other, has been built at a total cost of 3,000,000 francs.

Recent Events.—The Germans established in 1899 military stations on the river Rusisi and on Lake Kivu, to guard against an invasion of their territory in East Africa by the mutinous Batatela troops of the Congo State. The Belgian garrisons on Lake Kivu, which had previously been withdrawn, were thereupon reinstated, and a formal protest was made against the occupation by Germany of Congolese territory. The German Government asserted in reply that the map which illustrated the treaty of 1884 makes the Rusisi the frontier, and places Lake Kivu on the German side of the line. M. Beernaert went to Berlin as special envoy of the Independent State in January, 1900, to show that it was another map on which neither river nor lake appears, and that in subsequent documents Germany recognized a more easterly boundary. He arranged with the German Government to have the boundary surveyed by a mixed commission. Pending the demarcation both governments kept military forces of equal strength in the disputed district.

In the early part of 1900 a fresh outbreak of the Budjas occurred in the Mongalla district of the Congo. On March 4 they killed Lieut. Weylants and another European near Jambeta, having two months before attacked the military station. The new revolt was attributed by some to cruelties practiced on the natives to compel them to collect caoutchouc for the trading companies. In the Belgian Chamber an investigation was demanded, to show how far the officers and public force of the Congo State were implicated in barbarous methods of collecting rubber whereby the population was practically condemned to hard labor under the pretext of civilizing the natives. The Belgian ministers having rejected the proposal on the ground that the conditions of the loan of the Belgian Government to the Congo State gave only the right to obtain financial and commercial information, not to intervene in the affairs of the Congo State, which was a foreign country, the Chamber refused to entertain the interpellation. During the debate stories were brought out of Belgian officers having ordered hands to be cut off and sanctioned other atrocities, and charges were made that the agents of trading companies were ferocious. In suppressing the revolt in the Mongalla district, wholesale massacres of natives were alleged to have taken place. The Congo Government submitted these reports to the judicial authorities, to be investigated. In order to prevent any complicity on the part of its own officers, it

forbids all its agents to engage in trade. It also prohibits them from having recourse to arms except for legitimate defense. The state did not intervene in any way in the nomination of agents of private companies or in the direction of the latter, but had decided to repress all excesses in its territory. The Mongalla revolt was not terminated by the first re-enforcements sent into the Budja country, and in July an additional force of 500 soldiers was sent up. On April 17 the black garrison of the Chinkakassa fort below Boma mutinied. It was composed mainly of about 100 Batatelas, who had been sent to the Lower Congo when the expeditionary force of Baron Dhanis revolted. The black soldiers killed a white officer, attacked the rest in the house of the commandant, where they had taken refuge, and began to bombard Boma with the guns of the forts. Volunteers from Boma relieved the beleaguered whites, and began an assault on the fort, upon which most of the mutineers fled and the rest surrendered.

CONGREGATIONALISTS. The Congregational Yearbook for 1900 gives in its summary of the statistics of the Congregational churches in the United States the following numbers: Of churches, 5,604; of ministers, 5,614; of members, 629,874; of families, 400,249; of additions by confession during the year, 24,514; of baptisms during the year, 10,390 of adults and 11,824 of infants; of members of Sunday schools, 682,907, with an average attendance of 408,506; of societies of Christian Endeavor, 3,096, with 191,753 members. Of the churches, 4,228 are recorded as "supplied" and 1,376 as "vacant"; of the ministers, 3,655 were "in pastoral work" and 1,919 "without charge." Amounts of contributions (4,883 churches reporting): For foreign missions, \$445,508; for education, \$193,376; for church building, \$88,388; for home missions, \$477,852; for the American Missionary Association, \$141,022; for Sunday schools, \$61,938; for ministerial aid, \$24,107; for other purposes, \$678,227; making a total, as footed up in the tables, of \$2,110,413. Amount of contributions for home expenditures reported by 4,854 churches, \$7,023,124; amount of legacies, \$438,738.

The Congregational Education Society in 1899 aided 162 students preparing for the ministry, 8 colleges, and 17 academies. In the New West department for the aid of mission schools in Utah and New Mexico, Salt Lake College with Gordon Academy, Proctor Academy in Utah, and 10 mission schools were assisted. The receipts for the year were \$147,372.

The Congregational Church Building Society in 1899 received \$247,307 and expended \$197,560.

The Ministerial Aid fund of the National Congregational Council, which in 1899 amounted to \$118,000, furnished an income of about \$5,000, which was distributed in pensions of from \$25 to \$200 a year to aged or disabled Congregational ministers and missionaries and their families. Fifty-nine persons or families were thus aided in 1899.

The 7 theological seminaries—Andover, Bangor, Chicago, Hartford, Oberlin, Pacific, and Yale—return 22 resident licentiates and fellows, 17 members of advanced and graduate classes, and had, in 1898-'99, 64 professors and 23 instructors and lecturers.

The receipts of the Congregational Sunday School and Publishing Society for 1899 were \$62,990, a gain of about \$5,000 over those of the preceding year. Of this amount \$23,554 were Children's Day receipts. The sum of \$7,500 was appropriated for missionary work. The superintendents and missionaries of the society had organized 325 Sunday schools directly and 150 through

thers, and had reorganized 191 schools. Three thousand and forty-six grants of lesson helps, periodicals, and other literature had been made to 278 schools.

Congregational Home Missionary Society.

The seventy-fourth annual meeting of the Congregational Home Missionary Society was held in Detroit, Mich., June 5 to 7. Gen. Oliver O. Howard presided. The report showed that the receipts of the society for the year had been \$346,777, showing an increase of nearly \$40,000 over those of the previous year, and the expenditure \$21,672. The debt of \$133,469 standing at the beginning of the year had been reduced to \$108,754. The Auxiliary Societies had raised and expended, on their own fields, in addition, \$199,103. Seventeen hundred and sixty-two missionaries and superintendents had been employed, preaching to 504 congregations, with which 2,005 Sunday schools were connected, having 142,812 members. Twenty-four churches had been organized during the year, 36 had assumed self-support; 62 houses of worship had been completed, 69 parsonages provided, and 7,400 persons added to church membership.

The eighteenth annual meeting of the Woman's Department was held in connection with the meeting of this society.

American Board.—The ninety-first annual meeting of the American Board of Commissioners for Foreign Missions was held in St. Louis, Mo., beginning Oct. 10. Mr. Samuel Capen presided. Recognition was made in the report of the Home Department of the death of the Rev. R. S. Morris, D.D., ex-president, and of the value of the services he had rendered as a corporate member and as president of the board. Forty-two missionaries had been sent out during the year: 39 had returned on furlough, besides those who had been driven out of north China by the boxer disturbances, and 13 had been killed in those disturbances. The year had been prosperous financially, and had it not been for the extra expenses arising from the famine in India and the disturbed condition of China, the debt of the board might have been met. The plan for raising the "Twentieth Century fund" of \$250,000 was being pushed. The receipts of the year from all sources, including \$1,273 for the debt, had been \$77,957—an increase of \$93,756 from the previous year. Of these receipts, \$516,536—or \$26,843 more than in the previous year—came in the form of gifts from individuals, churches, and various societies, of which sum \$214,774 were contributions of the several woman's boards. The income from legacies showed an increase over the previous year of \$52,663, and the income from permanent funds an increase of \$7,125. The increase in special donations amounted to \$19,543. The "Annual Survey" of the missions represented 20 mission fields, in which were included 12 stations, 1,268 out stations, and 1,641 places stated preaching, which were served by 166 ordained missionaries, 239 native pastors, 1,872 native school teachers, and 518 other native laborers, making a total of 4,011 agents. The churches, numbering 495, returned 51,699 members, 4,523 of whom had been added during the year; while the total number of members from the first, as nearly as could be learned, had been 153,107. The educational work of the various missions comprised theological seminaries, with 196 students for ministry, 11 boarding and high schools, and 53 common schools, with a total of 59,671 pupils under instruction. The native contributions amounted to \$156,642. In the several mission fields it was represented that the persecution

of the Armenians in Turkey had opened their minds as never before to the reception of missionary instruction. The workers in China had increased tenfold. Though missionary work had been brought to an enforced halt in north China, it would not retreat. In south China there had not been much active disturbance. In Madras, India, the work in the hospital had appealed so powerfully to the hearts and minds of native Hindus that men of wealth contributed to the extent of \$14,000 for the erection of the building, and gave liberally toward its support. The increase in missionary converts during the year had been more than 10 per cent. The meeting following up suggestions offered in the president's address, approved of a yearly canvass in October of every church for the six benevolent societies; commended the forward movement for a "Twentieth Century fund"; and, recognizing the paramount importance of educating the rising generation in responsibility for the redemption of the world through Jesus Christ, advised the provision in the Sunday schools of a permanent place for this education. A letter of greeting was received from the Hawaiian Evangelical Association, Sandwich Islands, with a contribution of \$9,000 toward the Twentieth Century fund.

The Doshisha, or College of the American Board, at Kioto, Japan, which had been for a few years under the control of trustees not in sympathy with the doctrines of the orthodox churches, having been reorganized, has begun its work again as a publicly declared Christian school, and the fact is explicitly set down in its constitution.

American Missionary Association.—The fifty-fourth annual meeting of the American Missionary Association was held in Springfield, Mass., October 23, 24, and 25, the Rev. Dr. F. A. Noble presiding. The treasurer reported that the receipts for the year had been \$336,651, of which \$168,096 consisted of gifts from institutions and individuals, \$104,641 were from legacies, and a large part of the rest from tuition fees. The expenditures had amounted to \$345,049. The receipts were \$38,802 larger than in the previous year, and for the third consecutive year it was possible to report no debt and a small balance on hand. The Executive Committee reported in the Southern educational work 29 common schools closely related to the churches, in places where there was no worthy provision in public schools, and taught chiefly by the graduates of the normal and graded schools; 43 normal and graded schools, 12 of which were under the care of negro graduates of the association's own higher educational institutions; and 5 chartered institutions; making 77 schools in all, 10 of which are otherwise classified as mountain schools, with 432 instructors and 13,203 pupils. Of the students 95 were taking theological, 85 collegiate, and 1,523 normal courses. The committee remarked that in these schools, in a large measure, pupils were completing their studies at an average age in which twenty years ago they began their education. The normal and graded schools were represented as enjoying, as a rule, the good will of the educated people of the localities in which they are situated; and the good character and correct behavior as citizens of their students were commended. The demand upon them for service as teachers and skilled workers was in excess of the supply, and no dependent graduates of the schools were heard of. In the Southern church work, 222 churches, with 147 ministers and missionaries, 11,602 members, 1,023 additions on profession of faith during the year, and 15,293 children in Sunday schools, were returned. Six-

teen new churches had been organized and 5 dropped. In the development of the Church work during the past ten years, 122 churches had been established, only 8 of which were connected with pre-existing schools. The 54 mountain churches (included in the 222) had 1,613 members. The ministrations of their pastors usually covered from 2 to 5 different church organizations, sometimes many miles apart. The Indian missions included 21 churches with 34 out stations, 1,303 members, 2,803 Sunday-school scholars, and 211 pupils in the 5 ordinary schools, and were served by 49 white and 42 Indian missionaries and teachers. The churches had contributed \$2,419 for benevolence and self-support. A decrease in the number of schools during the past ten years was accounted for as the result of changed conditions of education among the Indians. In future attention would be predominantly given to direct evangelizing and mission work among these people, rather than to increase of educational work, or even to the permanent maintenance of the present schools. From the work among the Chinese were returned 21 missions, 43 workers, 15 of whom were Chinese, and 1,446 pupils in schools, 183 of whom had given evidence of conversion. A work in Porto Rico, now in its second year, comprised 2 schools with 8 instructors, 292 pupils, and 1 evangelist. The committee of nine appointed by the six national Congregational societies to consider plans for the readjustment of their work so as to secure greater unity of action and economy of administration, brought in a report embodying recommendations that all the six societies hold a joint annual meeting in the month of October, while provision shall be made for a united missionary conference also each year in a part of the country where the annual meeting is not held; that the six societies adopt a common basis of representation by delegates to the annual meeting, the delegates to be selected each year either by the churches directly or by the local conferences acting for the churches; that each society have its separate executive board and committees, and its separate budget of receipts and expenses; that each society have its own secretary, to be appointed by its executive board; that the treasuries of the societies be combined in two offices with two treasurers, one to be located in Boston and the other in New York city, and that these treasurers, respectively, be chosen by the local executive boards acting together; that the solicitation and collection of funds for all the societies be under the care of a special subcommittee of 9 members, to be composed of representatives of all the societies, which shall be given the powers and facilities (specified in the report) to reach the Church in an effective manner; and that there be such an adjustment of the work or territory as will secure greater economy, and prevent two societies from doing similar work upon the same field; if two or more societies fail to agree upon the adjustment of work or territory, the committee of nine provided for above to be a committee of arbitration on the matter, the vote of 7 of them to be decisive. This report is to be submitted to the six missionary societies for discussion and future action. The committee of five appointed in 1899 to consider the relations of this association with other benevolent societies of the denomination and such administrative adjustments as might help toward their federation and toward the efficiency of the work of the association, presented a report, of which three resolutions were adopted, while three others were laid on the table to be taken up when the movement toward unity on the part of the other missionary

societies shall have reached a stage more appropriate to their consideration. The resolutions that were adopted approve the steps already taken toward a closer alliance of the societies, and promise co-operation with the efforts of the committee of nine toward that end; recommend the holding of one general conference of the benevolent societies each year, where the work of all the societies shall be presented, to constitute their annual meeting; and advise the publication of a single monthly magazine for the representation of the interests of all the societies.

The seventeenth annual meeting of the Women's Home Missionary Association was held in Springfield, Mass., October 18. The Bureau of Woman's Work reported that the contributions in the past twelve months from women's missionary societies had been \$24,673. Forty-four missionaries had been assigned as special representatives of the State organizations to whose support in the mission fields of the association those organizations were pledged. The literature of the association had been circulated freely.

The thirty-second annual meeting of the Woman's Board of Missions of the Interior was held in Chicago, October 23. The total receipts of the society had been \$77,632, being \$2,770 less than those of the preceding year. The gifts of the Young People's Christian Endeavor Societies and of the Young Women's Societies had amounted to \$9,347, or \$1,709 less than in the previous year. Seven missionaries had returned during the year to their fields after furlough; 13 were at home on furlough, 4 of them from China; 4 had resigned; and 4 new missionaries had been adopted. Nearly \$4,800 had been raised on a "Century Call" for \$20,000.

Congregationalists in Canada.—A statistical report presented at the annual meeting of the Congregational Union of Ontario and Quebec included returns from 64 out of 81 churches. In the province of Quebec 17 churches had 1867 members, with 1,572 members in 15 Sunday schools. In Ontario 47 churches had 4,322 members and 49 Sunday schools 4,507 members. The annual meeting of the union was held at Montreal in June. The Rev. Dr. George, principal of the Congregational College, was elected chairman for 1901. The work of the churches in the home field and the "Forward Movement" in the Northwest were reviewed. Concerning foreign missions a report was made of the Chisamba Mission in Africa. An invitation which had been offered by the Canadian delegates to the International Congregational Council to hold its next meeting in Montreal was approved. A number of religious, social, and practical questions were the subjects of addresses. A committee was appointed to consider the practicability of a Congregational Union for Canada.

Congregationalists in Jamaica.—The Congregational Union Assembly in Jamaica adopted a Twentieth Century scheme, the principal features of which are the holding of special meetings in all the churches with the view of raising the standard of spiritual life and service; a revision of the lists of church members; the printing in 1901 of a memorial volume giving the history of each church with its roll of members; and a fund, to be composed of gifts of 5 shillings and upward, for local purposes, home mission work, and other objects of the union.

Congregationalists in England and Wales.—The statistics of the British Congregational churches for the year ending December 1, 1899, show that on that date there were in England and Wales (including the Channel Islands) 4,592

churches and mission stations, an increase of 23, which were provided 1,636,269 sittings. In these churches, so far as the returns show (417 churches or mission stations having failed to send information as compared with 516 in 1898), there were 388,009 members, and in their Sunday schools 614,742 scholars, an increase of 10,670; and 54,135 teachers, an increase of 7,389. Adding to these the churches and mission stations in other parts of the kingdom (those of the missions in Scotland and Ireland being, however, incomplete) the whole number of places of worship was 4,851, with a total membership of 415,444, showing an increase of 37,900. The total sitting accommodation provided in these churches was 1,733,065. The clerical force comprised 3,132 ordained ministers in the British Isles, 221 recognised evangelists and lay pastors, and 5,484 local teachers. Two hundred and ninety churches were without pastoral oversight, and 289 ministers were described as "without pastoral charge." The 781 churches and mission stations in the British colonies comprised 121 in Canada, 257 in Australasia, and 288 in South Africa; and 155 churches and preaching stations were maintained on the Continent of Europe. Four hundred and twenty-nine missionaries were resident in the colonies, 383 of whom were in active service. The theological colleges and institutes returned 407 students for the Congregational ministry; in addition to which 10 institutions in heathen lands belonging to the London Missionary Society had over 300 students in training. Sixteen new churches had been formed during the year, 41 chapels erected, of which 12 were in the colonies; foundation stones of new buildings had been laid, and 24 additional sites secured.

The Colonial Missionary Society returned an income of £6,108 for work in 11 colonies. The report presented to the annual meeting, May 10, gave a survey of work in Canada, Newfoundland, Jamaica, Australia, New Zealand, and South Africa. The war in South Africa had naturally increased the difficulties there, both of churches and of ministers, and added to their claims on the Society, but it would be difficult to tell till the war was over how much would be needed from the Emergency fund. Schemes were being considered by which the scope of the Twentieth Century fund might be so enlarged as to include all the Colonial Congregational Unions, when the report would be made to raise 1,000,000 guineas. The annual meeting of the London Missionary Society was held in London, April 30. The total ordinary income for the year had been, including legacies, £148,930; while, adding what had been received for the India Famine fund and certain gifts received from other sources, an aggregate income was made up of £157,910. The expenditures had been £184,815. The whole amount so far obtained from the Centenary fund was £105,488.

The annual meeting of the Congregational Union of England and Wales was held in London, beginning May 7, with Mr. Canvill Williams as chairman for the year. The report of the Executive Committee represented that the total amount of the year's receipts and stock was £16,488, and that there remained a balance of receipts over expenditure of £180. The Publication Department reported a falling off in the year's business, which was attributed to the inauguration of the Twentieth Century fund and the appeals for various war funds. The effect of the canvassing for the Twentieth Century fund was spoken of as "in the widest and best sense of a propagandist character." It had afforded opportunities

for the inculcation of Congregational principles and for instruction in Congregational church history which had been diligently used and greatly enjoyed by the churches that had profited by them. The council of the Young People's Union was organizing its work in London, a part of it being a bureau through which young people coming up to the metropolis might be introduced to Congregational churches. A number of active district branches had been formed. Several manuscripts of historical value, among them some unpublished works of ejected ministers, had been added to the collections in Memorial Hall.

A resolution was adopted commending the Simultaneous Mission of the Free Church Federation. A declaration relative to the recent educational proposals of the Government reaffirmed the profound conviction of the assembly that the children of the people should receive the best possible education in public schools, free from retrograde limitations and sectarian tests, and under popular and representative—not private and clerical—control. Papers were read upon *The Place of the Church Meeting in the Life and Work of the Churches*, *The Present Position of the Temperance Question*, *Doctrine and Ethics in Modern Preaching*, *The Present Position of the Sacerdotal Movement in the Established Church*; and a Young People's meeting was addressed on *The Joyousness of Christian Life*, *The Attractions of Nonconformity*, and *Sex*. The Rev. Joseph Parker, D.D., was elected chairman for 1901.

The autumnal session of the union was held at Newcastle-upon-Tyne, beginning October 16. The address of the chairman, Mr. Carvell Williams, was on the subject of *Present-day Evils and Duties*, and related to denominational questions awaiting solution, the war in South Africa, the trouble in China, disestablishment, the conflict against ritualism, the educational question, intemperance, Sunday-school reform, general missions, and the Simultaneous Mission contemplated for 1901. The annual report contained remarks on the striking change which the denomination had experienced during the closing century; the despised sect of 1800 having in 1900 won an acknowledged place among the religious forces at work in the nation. The recent Church Congress had given evidence that some of the ablest men in the Anglican Church had come to recognize the necessity of adopting toward Nonconformists a tone more in harmony with religious sentiment, and more consonant with the facts of the case. Regarding the sacerdotal controversy within the Church of England, it was observed that Congregationalists would have had no right to interfere with the internal arrangements of a Church from which they had seceded if that Church did not still claim to include the whole nation within its fold. Two appeals from South Africa—one from the Natal Congregational Union and one from 414 Dutch ministers—taking opposite ground respecting questions of the war—had been referred to the Special Purpose Committee for acknowledgment. The treasurer of the Publication Department reported the receipt of £10,377 from sales. A special committee was appointed to investigate the subject of ministerial removals and settlements. A report made on behalf of the Twentieth Century fund showed that while the amount contemplated at first had been more than promised, it had been so allotted by the donors that there was danger lest some of the objects on which the hearts of its projectors were most set would not be realized. A very large proportion of the money had been set apart by the givers exercising the privilege allowed them

under the terms of the scheme for local purposes, to the neglect of the great public societies of the denomination. A discussion of The Problem of Congregational Churches in Large Towns resulted in the appointment of a committee to consider the whole subject, together with that of village churches, with power to take such immediate steps as might be considered desirable and found to be practical. A deputation was appointed to represent the union and convey its congratulations at the celebration of the Union of the Free and the United Presbyterian Churches of Scotland, about to be held. A resolution passed by the assembly urged a uniting of all Christians in order to promote any practical measures for the restriction of the liquor traffic. Other resolutions affirmed that the internal strife within the Established Church itself showed the necessity for a definite change in the ecclesiastical conditions, and that in the opinion of the assembly the only change which would prove satisfactory was disestablishment; declared the various proposals for a Roman Catholic University in Ireland to be unwise and reactionary attempts to meet the case by a remedy contrary alike to wise principle and sound policy; and emphasized the necessity of the application of the fundamental principles of religious equality to the question of national education. A meeting was held in behalf of the Congregational settlements of Mansfield (Canningtown), the Women's Settlement (Canningtown), Browning Hall (Walworth), Ipswich, Middlesborough, and Manchester.

A Congregational Historical Society is in course of formation, the object of which will be to collect, examine, edit, and publish the documents and records of the denomination, which are described as being numerous and interesting.

Congregational Union of South Africa.—The amalgamation of the Congregational unions of Natal and the Cape Colony as "the Congregational Union of South Africa" was consummated at a joint meeting held for that purpose in Durban, Natal, early in the fall. About 50 ministers and delegates from all parts of South Africa were present on the occasion. The Rev. W. Friend, of Port Elizabeth, presided. The Rev. J. F. Ritchie was chosen secretary, to devote all his time to the work of that office. Besides an anticipated year's income of £800, the union expects to receive grants from the London and the Colonial Missionary Societies.

CONGRESS. The Fifty-sixth Congress met for its first session Monday, Dec. 4, 1899. Its membership was as follows:

SENATE.

President *pro tempore*, WILLIAM P. FRYE.

Alabama.	Florida.
1901. John T. Morgan, D.	1903. Stephen R. Mallory, D.
1903. Edmund W. Pettus, D.	1905. J. P. Tallaferrro, D.
Arkansas.	Georgia.
1901. James H. Berry, D.	1901. Augustus O. Bacon, D.
1903. James K. Jones, D.	1903. Alex. S. Clay, D.
California.	Idaho.
1903. George C. Perkins, R.	1901. George L. Shoup, R.
1905. Thomas R. Bard, R.	1903. Henry Heitfeld, P.
Colorado.	Illinois.
1901. Edward O. Wolcott, R.	1901. Shelby M. Cullom, R.
1903. Henry M. Teller, I.	1903. William E. Mason, R.
Connecticut.	Indiana.
1903. Orville H. Platt, R.	1903. Chas. W. Fairbanks, R.
1905. Joseph R. Hawley, R.	1905. Albert J. Beveridge, R.
Delaware.	Iowa.
1901. Richard R. Kenney, D.	1901. John H. Gear, R.
1905.	1903. William B. Allison, R.

Kansas.	North Dakota.
1901. Lucien Baker, R.	1903. H. C. Hansbrough, R.
1903. William A. Harris, P.	1905. P. J. McCumber, R.
Kentucky.	Ohio.
1901. William Lindsay, D.	1903. Joseph B. Foraker, R.
1903. William J. Deboe, R.	1905. Marcus A. Hanna, R.
Louisiana.	Oregon.
1901. Donelson Caffery, D.	1901. George W. McBride, R.
1903. Samuel D. McEnery, D.	1903. Joseph Simon, R.
Maine.	Pennsylvania.
1901. William P. Frye, R.	1903. Boies Penrose, R.
1905. Eugene Hale, R.	1905. Matthew S. Quay, R.
Maryland.	Rhode Island.
1903. Geo. L. Wellington, R.	1901. George P. Wetmore, R.
1905. Louis E. McComas, R.	1905. Nelson W. Aldrich, R.
Massachusetts.	South Carolina.
1901. George F. Hoar, R.	1901. Benjamin R. Tillman, D.
1905. Henry C. Lodge, R.	1903. John L. McLaurin, D.
Michigan.	South Dakota.
1901. James McMillan, R.	1901. Richard F. Pettigrew, R.
1905. Julius C. Burrows, R.	1903. James H. Kyle, I.
Minnesota.	Tennessee.
1901. Knute Nelson, R.	1901. Thomas B. Turley, D.
1905. Cushman K. Davis, R.	1905. William B. Bate, D.
Mississippi.	Texas.
William V. Sullivan, D.	1901. Horace Chilton, D.
1905. H. D. Money, D.	1905. C. A. Culberson, D.
Missouri.	Utah.
1903. George G. Vest, D.	1903. Joseph L. Rawlins, D.
1905. F. M. Cockrell, D.	1905.
Montana.	Vermont.
1901. Thomas H. Carter, R.	1903. Jonathan Ross, R.
1905. William A. Clark, D.	1905. Redfield Proctor, R.
Nebraska.	Virginia.
1901. John M. Thurston, R.	1901. Thomas S. Martin, D.
1905. William V. Allen, P.	1905. John W. Daniel, D.
Nevada.	Washington.
1903. John P. Jones, S.	1903. George Turner, P.
1905. William M. Stewart, I.	1905. Addison Q. Foster, R.
New Hampshire.	West Virginia.
1901. William E. Chandler, R.	1901. Stephen B. Elkins, R.
1903. Jacob H. Gallinger, R.	1905. Nathan B. Scott, R.
New Jersey.	Wisconsin.
1901. William J. Sewel, R.	1903. John C. Spooner, R.
1905. John Kean, R.	1905. Joseph V. Quarles, R.
New York.	Wyoming.
1903. Thomas C. Platt, R.	1901. Francis E. Warren, R.
1905. C. M. Depew, R.	1905. Clarence D. Clark, R.
North Carolina.	
1901. Marion Butler, R.	
1903. Jeter C. Pritchard, R.	

Senator Sullivan, Mississippi, was appointed in place of E. C. Walthall, deceased; Senator Allen, Nebraska, in place of M. L. Hayward, deceased; and Senator Ross, Vermont, in place of Justin S. Morrill, deceased. The Senate refused to admit Mr. Quay, appointed by the Governor of Pennsylvania, and Mr. Clark, of Montana, resigned, May 15, 1900, to anticipate action on charges of bribery brought against him. The vacancies in Delaware and Utah remained unfilled.

HOUSE OF REPRESENTATIVES.

Speaker, DAVID B. HENDERSON, Iowa.

Alabama.	
George W. Taylor, D.	J. H. Bankhead, D.
Jesse F. Stallings, D.	John L. Burnett, D.
Henry D. Clayton, D.	Joseph Wheeler, D.
Gaston A. Robbins, D.	O. W. Underwood, D.
Willis Brewer, D.	
Arkansas.	
P. D. McCulloch, Jr., D.	William L. Terry, D.
John S. Little, D.	H. A. Dinwiddie, D.
Thomas C. McRae, D.	S. Brundidge, Jr., D.

California.

John A. Barham, R.
 Marion De Vries, D.
 Victor H. Metcalf, R.
 Julius Kahn, R.

Colorado.

John F. Shafroth, S.
 John C. Bell, P.

Connecticut.

Stevens Henry, R.
 D. Sperry, R.
 Charles A. Russell, R.
 Ebenezer J. Hill, R.

Delaware.

John H. Hoffecker, R.

Florida.

M. Sparkman, D.
 Robert W. Davis, D.

Georgia.

Rufus E. Lester, D.
 James M. Griggs, D.
 ajah B. Lewis, D.
 William C. Adamson, D.
 F. Livingston, D.
 Charles L. Bartlett, D.
 John W. Maddox, D.
 William M. Howard, D.
 Farish Carter Tate, D.
 William H. Fleming, D.
 W. G. Brantley, D.

Idaho.

Edgar Wilson, At large, S.

Illinois.

James R. Mann, R.
 William Lorimer, R.
 George P. Foster, D.
 Thomas Cusack, D.
 Edward T. Noonan, D.
 Henry S. Boutell, R.
 George E. Foss, R.
 J. Hopkins, R.
 Robert R. Hitt, R.
 George W. Prince, R.
 Walter Reeves, R.
 Joseph G. Cannon, R.
 Vespasian Warner, R.
 Joseph V. Graff, R.
 Benjamin F. Marsh, R.
 William E. Williams, D.
 Benjamin F. Caldwell, D.
 Thomas M. Jett, D.
 Joseph B. Crowley, D.
 J. R. Williams, D.
 William A. Rodenberg, R.
 George W. Smith, R.

Indiana.

James A. Hemenway, R.
 Robert W. Miers, D.
 William T. Zenor, D.
 Francis M. Griffith, D.
 George W. Farris, R.
 James E. Watson, R.
 Jesse Overstreet, R.
 George W. Cromer, R.
 Charles B. Landis, R.
 E. D. Crumacker, R.
 George W. Steele, R.
 James M. Robinson, D.
 Abraham L. Brick, R.

Iowa.

Thomas Hedge, R.
 E. R. Lane, R.
 B. Henderson, R.
 Albert N. Haugen, R.
 Robert G. Cousins, R.
 John F. Lacey, R.
 John A. T. Hull, R.
 William P. Hepburn, R.
 Smith McPherson, R.
 Jonathan P. Dolliver, R.
 Lot Thomas, R.

Kansas.

J. Bailey, At large, R.
 Charles Curtis, R.
 D. Bowerstock, R.
 Edwin R. Ridgely, P.
 James M. Miller, R.
 W. A. Calderhead, R.
 William A. Reeder, R.
 Chester I. Long, R.

Kentucky.

Charles K. Wheeler, D.
 D. Allen, D.
 John S. Rhea, D.
 Daniel H. Smith, D.
 Oscar Turner, D.
 Robert S. Berry, D.
 June Gayle, D.
 G. G. Gilbert, D.
 Samuel J. Pugh, R.
 T. Y. Fitzpatrick, D.
 Vincent Boreing, R.

Louisiana.

Holoph Meyer, D.
 Robert C. Davey, D.
 Robert F. Broussard, D.
 Phanor Breazeale, D.
 Joseph E. Ransdell, D.
 S. M. Robertson, D.

Maine.

James L. Allen, R.
 Charles E. Littlefield, R.
 Edwin C. Burleigh, R.
 Charles A. Boutelle, R.

Maryland.

John W. Smith, D.
 William B. Baker, R.
 Frank C. Wachter, R.
 James W. Denny, D.
 Sydney E. Mudd, R.
 George A. Pearre, R.

Massachusetts.

George P. Lawrence, R.
 Frederick H. Gillett, R.
 John R. Thayer, D.
 George W. Weymouth, R.
 William S. Knox, R.
 William H. Moody, R.
 Ernest W. Roberts, R.
 Samuel W. McCall, R.
 John F. Fitzgerald, D.
 Henry F. Naphen, D.
 Charles F. Sprague, R.
 William C. Lovering, R.
 William S. Greene, R.

Michigan.

John B. Corliss, R.
 Henry C. Smith, R.
 Washington Gardner, R.
 J. Hamilton, R.
 William Alden Smith, R.
 Samuel W. Smith, R.
 Edgar Weeks, R.
 J. W. Fordney, R.
 Roswell P. Bishop, R.
 Rousseau O. Crump, R.
 William S. Mesick, R.
 Carlos D. Sheldon, R.

Minnesota.

James A. Tawney, R.
 James T. McCleary, R.
 Joel P. Heatwole, R.
 Frederick C. Stevens, R.
 Loren Fletcher, R.
 Page Morris, R.
 Frank M. Eddy, R.

Mississippi.

John M. Allen, D.
 Thomas Spight, D.
 T. C. Catchings, D.
 Andrew F. Fox, D.
 John S. Williams, D.
 Frank A. McLain, D.
 Patrick Henry, D.

Missouri.

James T. Lloyd, D.
 W. W. Rucker, D.
 John Dougherty, D.
 C. F. Cochran, D.
 W. S. Cowherd, D.
 D. A. De Armond, D.
 James Cooney, D.
 Dorsey W. Shackelford, D.
 Champ Clark, D.
 Richard Bartholdt, R.
 Charles F. Joy, R.
 Charles E. Pearce, R.
 Edward Robb, D.
 W. D. Vandiver, D.
 M. E. Benton, D.

Montana.

A. J. Campbell, D.

Nebraska.

E. J. Burkett, R.
 David H. Mercer, R.
 John S. Robinson, D.
 William L. Stark, P.
 R. D. Sutherland, P.
 William Neville, P.

Nevada.

F. G. Newlands, S.

New Hampshire.

Cyrus A. Sulloway, R.
 Frank G. Clarke, R.

New Jersey.

H. C. Loudenslager, R.
 John J. Gardner, R.
 Benjamin F. Howell, R.
 Joshua S. Salmon, D.
 James F. Stewart, R.
 Richard W. Parker, R.
 William D. Daly, D.
 Charles N. Fowler, R.

New York.

Townsend Scudder, D.
 John J. Fitzgerald, D.
 Edmund H. Driggs, D.
 Bertram T. Clayton, D.
 Frank E. Wilson, D.
 Mitchell May, D.
 Nicholas Muller, D.
 Daniel J. Riordan, D.
 Thomas J. Bradley, D.
 A. J. Cummings, D.
 William Sulzer, D.
 George B. McClellan, D.
 Jefferson M. Levy, D.
 W. A. Chanler, D.
 Jacob Ruppert, Jr., D.
 John Q. Underhill, D.
 A. S. Tompkins, R.
 J. H. Ketcham, R.
 A. V. S. Cochrane, R.
 Martin H. Glynn, D.
 John K. Stewart, R.
 L. N. Littauer, R.
 C. W. Emerson, R.
 C. A. Chickering, R.
 James S. Sherman, R.
 George W. Ray, R.
 M. E. Driscoll, R.
 Sereno E. Payne, R.
 Charles W. Gillett, R.
 J. M. Wadsworth, R.
 J. M. E. O'Grady, R.
 William H. Ryan, D.
 D. S. Alexander, R.
 Ed. B. Vreeland, R.

North Carolina.

John H. Small, D.
 George H. White, R.
 Charles R. Thomas, D.
 John W. Atwater, P.
 William W. Kitchin, D.
 John D. Bellamy, D.
 Theo. F. Kluttz, D.
 R. Z. Linney, R.
 W. T. Crawford, D.

North Dakota.

B. F. Spalding, R.

Ohio.

William B. Shattuc, R.
 J. H. Bromwell, R.
 John L. Brenner, D.
 Robert B. Gordon, D.
 David Meekison, D.
 Seth W. Brown, R.
 Walter L. Weaver, R.
 Archibald Lybrand, R.
 J. H. Southard, R.
 Stephen Morgan, R.
 C. H. Grosvenor, R.
 John J. Lentz, D.
 James A. Norton, D.
 Winfield S. Kerr, R.
 H. C. Van Voorhis, R.
 Joseph J. Gill, R.
 John A. McDowell, D.
 Robert W. Taylor, R.
 Charles Dick, R.
 F. O. Phillips, R.
 Theodore E. Burton, R.

Oregon.

Thomas H. Tongue, R.
 Malcolm A. Moody, R.

Pennsylvania.

G. A. Grow, At large, R.
 S. A. Davenport, At large, R.
 H. H. Bingham, R.
 Robert Adams, Jr., R.
 William McAleer, D.
 James R. Young, R.
 Alfred C. Harmer, R.
 Thomas S. Butler, R.
 Irving P. Wanger, R.
 Laird H. Barber, D.
 Henry D. Green, D.
 Marriott Brosius, R.
 William Connell, R.
 S. W. Davenport, D.
 James W. Ryan, D.
 M. E. Olmstead, R.
 Charles F. Wright, R.
 Horace B. Packer, R.
 Rufus K. Polk, D.
 Thaddeus M. Mahon, R.
 Edward D. Ziegler, D.
 Joseph E. Thropp, R.
 Summers M. Jack, R.
 John Dalzell, R.
 William H. Graham, R.
 Ernest F. Acheson, R.
 Joseph B. Showalter, R.
 Athelston Gaston, D.
 Joseph C. Sibley, D.
 James K. P. Hall, D.

<i>Rhode Island.</i>	
Melville Bull, R.	Adin B. Capron, R.
<i>South Carolina.</i>	
William Elliott, D.	D. E. Finley, E.
W. J. Talbert, D.	James Norton, D.
A. C. Latimer, D.	J. William Stokes, D.
Stanyarne Wilson, D.	
<i>South Dakota.</i>	
Charles H. Burke, At large, R.	Robt. J. Gamble, At large, R.
<i>Tennessee.</i>	
W. P. Brownlow, R.	John W. Gaines, D.
Henry R. Gibson, R.	Nicholas N. Cox, D.
John A. Moon, D.	Thetus W. Sims, D.
Charles E. Snodgrass, D.	Rice A. Pierce, D.
J. D. Richardson, D.	E. W. Carmack, D.
<i>Texas.</i>	
Thomas H. Ball, D.	S. W. T. Lanham, D.
Samuel B. Cooper, D.	Albert S. Burleson, D.
R. C. De Graffenreid, D.	R. B. Hawley, R.
John L. Sheppard, D.	Rudolph Kleberg, D.
Joseph W. Bailey, D.	James L. Slayden, D.
Robert E. Burke, D.	John H. Stephens, D.
Robert L. Henry, D.	
<i>Utah.</i>	
Brigham H. Roberts, D.	
<i>Vermont.</i>	
H. Henry Powers, R.	William W. Grout, R.
<i>Virginia.</i>	
William A. Jones, D.	Peter J. Otey, D.
William A. Young, D.	James Hay, D.
John Lamb, D.	John F. Rife, D.
Sydney P. Epes, D.	William F. Rhea, D.
Claude A. Swanson, D.	Julian M. Quarles, D.
<i>Washington.</i>	
F. W. Cushman, At large, R.	W. L. Jones, At large, R.
<i>West Virginia.</i>	
B. B. Dovenor, R.	David E. Johnston, D.
Alston G. Dayton, R.	Romeo H. Freer, R.
<i>Wisconsin.</i>	
Henry A. Cooper, R.	J. H. Davidson, R.
Herman B. Dahle, R.	John J. Esch, R.
Joseph W. Babcock, R.	Edward S. Minor, R.
Theobald Otjen, R.	Alexander Stewart, R.
Samuel S. Barney, R.	John J. Jenkins, R.
<i>Wyoming.</i>	
Frank W. Mondell, R.	
<i>Territorial Delegates.</i>	
<i>Arizona</i> —John F. Wilson, D.	
<i>New Mexico</i> —Pedro Perea, R.	
<i>Oklahoma</i> —Dennis T. Flynn, R.	

Amos L. Allen, Maine, was elected in place of Thomas B. Reed, who resigned; William F. Aldrich, Alabama, took his seat March 8, 1900; Charles A. Chickering, New York, died Feb. 9, 1900; W. T. Crawford, North Carolina, was unseated May 10, 1900; S. P. Epes, Virginia, died March 3, 1900; Alfred C. Harmer, Pennsylvania, died March 6, 1900; Smith McPherson, Iowa, resigned June 6, 1900; G. A. Robbins, Alabama, was unseated March 8, 1900; B. H. Roberts, Utah, was refused admission Jan. 25, 1900; J. W. Smith, Maryland, resigned Jan. 12, 1900; W. A. Young, Virginia, was unseated March 12, 1900; June W. Gayle, Kentucky, was elected in place of E. E. Settle, deceased; Joseph J. Gill, Ohio, in place of Lorenzo Danford, deceased; Henry D. Green, Pennsylvania, in place of Daniel Ermentrout, deceased; Francis R. Lassiter, in place of Sydney P. Epes, Virginia, deceased; C. E. Littlefield, Maine, in place of Nelson Dingley, deceased; William Neville, Nebraska, in place of W. L. Greene, deceased; D. W. Shackelford, Missouri, in place of Richard P. Bland, deceased; E. B. Vreeland, in place of Warren B. Hooker, resigned.

The first business of the House of Representatives after roll call was the election of a Speaker. David B. Henderson, of Iowa, was chosen, receiving 181 votes, to 156 for James D. Richardson, of Tennessee, 4 votes for John C. Bell, of Colorado,

and 2 votes for Francis G. Newlands, of Nevada. There were 12 members not voting. The organization of the House was completed by adopting the following resolution, offered by Mr. Grosvenor, of Ohio:

"Resolved, That Alexander McDowell, of the State of Pennsylvania, be, and he is hereby, chosen clerk of the House of Representatives;

"That Henry Casson, of the State of Wisconsin, be, and he is hereby, chosen sergeant-at-arms of the House of Representatives;

"That William J. Glenn, of the State of New York, be, and he is hereby, chosen doorkeeper of the House of Representatives;

"That Joseph C. McElroy, of the State of Ohio, be, and he is hereby, chosen postmaster of the House of Representatives; and

"That Henry N. Couden, of the State of Michigan, be, and he is hereby, chosen chaplain of the House of Representatives."

The rules of the Fifty-fifth Congress were then adopted by a vote of 178 to 159. In opposition to that course Mr. Richardson, of Tennessee, said:

"I feel certain that either the power of the Committee on Rules could be curtailed or the membership of that committee could be enlarged. I remember that the first time I ever had the honor to address this House it was in opposition to the powers of the Committee on Rules in the Fifty-second Congress, and I predicted that the three members who constitute a majority of that committee would in time become a legislative triumvirate. Under these rules the Committee on Rules not only decides what business the House must transact, but also what business the House shall not transact.

"It is enough to clothe the Speaker with the power of recognition and to supplement that by adding the power to appoint the committees of the House; but to add to those powers, great almost to the point of being dangerous, the absolute control of the House through its Committee on Rules is giving greater power to the Speaker of this House than any one man in this free republic ought to possess. To say that the power still remains with the House is a subterfuge, because the House can never pass upon a question until the Committee on Rules see fit to report. To say that the committee can be controlled by the majority is not candid, because that committee is considered the Speaker's official family, and no gentleman of the Speaker's party would serve upon it unless he could support the Speaker's policy. If a Democrat were the Speaker of this House, and I could not cordially and loyally support his policy in that committee, I would resign my membership upon it.

"I respect the gentleman from Pennsylvania, and no man on this side of the Chamber respects the gentleman from Iowa, now the honorable Speaker of this House, more than I do; and yet I divulge no secrets of the committee room when I say that with these gentlemen on it the Speaker of the Fifty-fifth Congress, with their help, absolutely controlled the Committee on Rules. I know that the Speaker of the Fifty-third and the Fifty-second Congresses—a great and splendid Democrat, whom we mourn even until this day—completely dominated the Committee on Rules when the House was Democratic. I know that the honorable Speaker of this House, under these rules, if they are adopted, will be practically the Committee on Rules; and the Committee on Rules is practically the House of Representatives. In view of that it does seem to me that if you will not curtail the power of that committee, certainly its membership ought to be enlarged."

Dec. 5 the Congress notified the President that it was ready to proceed to business, and he sent his annual message, as follows:

the Senate and House of Representatives:

At the threshold of your deliberations you are called to mourn with your countrymen the death of Vice-President Hobart, who passed from this world on the morning of Nov. 21 last. His great life now rests in eternal peace. His private life was pure and elevated, while his public career was distinguished by large capacity, stainless integrity, and exalted motives. He has been removed from the high office which he honored and glorified, but his lofty character, his devotion to duty, his honesty of purpose, and noble virtues remain with us as a priceless legacy and example. The Fifty-sixth Congress convenes in its first regular session with the country in a condition of unusual prosperity, of universal good will among the people at home, and in relations of peace and friendship with every government of the world. Our foreign commerce has shown great increase in volume and value. The combined imports and exports for the year are the largest ever shown by a single year in all our history. Our exports for 1899 alone exceeded by more than a billion dollars our imports and exports combined in 1870. The imports per capita were 20 per cent. less than in 1870, while the exports per capita are 58 per cent. more than in 1870, showing the enlarged capacity of the United States to satisfy the wants of its own increasing population, as well as to contribute to those of the peoples of other nations.

Exports of agricultural products were \$784,331,42. Of manufactured products we exported of value \$339,592,146, being larger than any previous year. It is a noteworthy fact that the only years in all our history when the products of our manufacturing sold abroad exceeded those bought abroad were 1898 and 1899.

Government receipts from all sources for the fiscal year ended June 30, 1899, including \$11,331,414, part payment of the Central Pacific Railroad indebtedness, aggregated \$610,982,004.35. Customs receipts were \$206,128,481.75, and those from internal revenue \$273,437,161.51.

For the fiscal year the expenditures were \$700,336,64.02, leaving a deficit of \$89,111,559.67.

The Secretary of the Treasury estimates that the receipts for the current fiscal year will aggregate \$640,958,112, and upon the basis of present appropriations the expenditures will aggregate \$60,958,112, leaving a surplus of \$40,000,000.

For the fiscal year ended June 30, 1899, the internal-revenue receipts were increased about \$10,000,000.

The present gratifying strength of the Treasury is shown by the fact that on Dec. 1, 1899, the available cash balance was \$278,004,837.72, of which \$239,744,905.36 was in gold coin and bullion. The conditions of confidence which prevail throughout the country have brought gold into more general use, and customs receipts are now most entirely paid in that coin.

The strong position of the Treasury with respect to cash on hand and the favorable showing made by the revenues have made it possible for the Secretary of the Treasury to take action under the provisions of section 3694, Revised Statutes, relating to the sinking fund. Receipts exceeded expenditures for the first five months of the current fiscal year by \$13,413,389.91, and, as mentioned above, the Secretary of the Treasury estimates that there will be a surplus of approximately \$40,000,000 at the end of the year. Under

such conditions it was deemed advisable and proper to resume compliance with the provisions of the sinking-fund law, which for eight years has not been done because of deficiencies in the revenues. The Treasury Department therefore offered to purchase during November \$25,000,000 of the 5-per-cent. loan of 1904, or the 4-per-cent. funded loan of 1907, at the current market price. The amount offered and purchased during November was \$18,408,600. The premium paid by the Government on such purchases was \$2,263,521, and the net saving in interest was about \$2,885,000. The success of this operation was sufficient to induce the Government to continue the offer to purchase bonds to and including the 23d day of December, instant, unless the remainder of the \$25,000,000 called for should be presented in the meantime for redemption.

Increased activity in industry, with its welcome attendant—a larger employment for labor at higher wages—gives to the body of the people a larger power to absorb the circulating medium. It is further true that year by year, with larger areas of land under cultivation, the increasing volume of agricultural products, cotton, corn, and wheat, calls for a larger volume of money supply. This is especially noticeable at the crop-harvesting and crop-moving period.

In its earlier history the national banking act seemed to prove a reasonable avenue through which needful additions to the circulation could from time to time be made. Changing conditions have apparently rendered it now inoperative to that end. The high margin in bond securities required, resulting from large premiums which Government bonds command in the market, or the tax on note issues, or both operating together, appear to be the influences which impair its public utility.

The attention of Congress is respectfully invited to this important matter with the view of ascertaining whether or not such reasonable modifications can be made in the national banking act as will render its service in the particulars here referred to more responsive to the people's needs. I again urge that national banks be authorized to organize with a capital of \$25,000.

I urgently recommend that to support the existing gold standard, and to maintain "the parity in value of the coins of the two metals (gold and silver) and the equal power of every dollar at all times in the market and in the payment of debts," the Secretary of the Treasury be given additional power and charged with the duty to sell United States bonds and to employ such other effective means as may be necessary to these ends. The authority should include the power to sell bonds on long and short time, as conditions may require, and should provide for a rate of interest lower than that fixed by the act of Jan. 14, 1875. While there is now no commercial fright which withdraws gold from the Government, but, on the contrary, such widespread confidence that gold seeks the Treasury demanding paper money in exchange, yet the very situation points to the present as the most fitting time to make adequate provision to insure the continuance of the gold standard and of public confidence in the ability and purpose of the Government to meet all its obligations in the money which the civilized world recognizes as the best. The financial transactions of the Government are conducted upon a gold basis. We receive gold when we sell United States bonds, and use gold for their payment. We are maintaining the parity of all the money issued or coined by authority of the Government. We are doing these things with the means at hand.

Happily at the present time we are not compelled to resort to loans to supply gold. It has been done in the past, however, and may have to be done in the future. It behooves us, therefore, to provide at once the best means to meet the emergency when it arises, and the best means are those which are the most certain and economical. Those now authorized have the virtue neither of directness nor economy. We have already eliminated one of the causes of our financial plight and embarrassment during the years 1893, 1894, 1895, and 1896. Our receipts now equal our expenditures; deficient revenues no longer create alarm. Let us remove the only remaining cause by conferring the full and necessary power on the Secretary of the Treasury and impose upon him the duty to uphold the present gold standard and preserve the coins of the two metals on a parity with each other, which is the repeatedly declared policy of the United States.

In this connection I repeat my former recommendations that a portion of the gold holdings shall be placed in a trust fund from which greenbacks shall be redeemed upon presentation, but when once redeemed shall not thereafter be paid out except for gold.

The value of an American merchant marine to the extension of our commercial trade and the strengthening of our power upon the sea invites the immediate action of the Congress. Our national development will be one-sided and unsatisfactory so long as the remarkable growth of our inland industries remains unaccompanied by progress on the seas. There is no lack of constitutional authority for legislation which shall give to the country maritime strength commensurate with its industrial achievements and with its rank among the nations of the earth.

The past year has recorded exceptional activity in our shipyards, and the promises of continual prosperity in shipbuilding are abundant. Advanced legislation for the protection of our seamen has been enacted. Our coast trade, under regulations wisely framed at the beginning of the Government and since, shows results for the past fiscal year unequalled in our records or those of any other power. We shall fail to realize our opportunities, however, if we complacently regard only matters at home and blind ourselves to the necessity of securing our share in the valuable carrying trade of the world.

Last year American vessels transported a smaller share of our exports and imports than during any former year in all our history, and the measure of our dependence upon foreign shipping was painfully manifested to our people. Without any choice of our own, but from necessity, the departments of the Government charged with military and naval operations in the East and West Indies had to obtain from foreign flags merchant vessels essential for those operations.

The other great nations have not hesitated to adopt the required means to develop their shipping as a factor in national defense and as one of the surest and speediest means of obtaining for their producers a share in foreign markets. Like vigilance and effort on our part can not fail to improve our situation, which is regarded with humiliation at home and with surprise abroad. Even the seeming sacrifices, which at the beginning may be involved, will be offset later by more than equivalent gains.

The expense is as nothing compared to the advantage to be achieved. The re-establishment of our merchant marine involves in a large measure our continued industrial progress and the exten-

sion of our commercial triumphs. I am satisfied the judgment of the country favors the policy of aid to our merchant marine, which will broaden our commerce and markets and upbuild our carrying capacity for the products of agriculture and manufacture; which, with the increase of our navy, mean more work and wages to our countrymen, as well as a safeguard to American interests in every part of the world.

Combinations of capital organized into trusts to control the conditions of trade among our citizens, to stifle competition, limit production, and determine the prices of products used and consumed by the people, are justly provoking public discussion, and should early claim the attention of the Congress.

The Industrial Commission, created by the act of the Congress of June 18, 1898, has been engaged in extended hearings upon the disputed questions involved in the subject of combination in restraint of trade and competition. They have not yet completed their investigation of this subject, and the conclusions and recommendations which they may arrive are undetermined.

The subject is one giving rise to many divergent views as to the nature and variety or cause and extent of the injuries to the public which may result from large combinations concentrating more or less numerous enterprises and establishments, which previously to the formation of the combination were carried on separately.

It is universally conceded that combinations which engross or control the market of any particular kind of merchandise or commodity necessary to the general community, by suppressing natural and ordinary competition, whereby prices are unduly enhanced to the general consumer, obnoxious not only to the common law, but also to the public welfare. There must be a remedy for the evils involved in such organizations. The present law can be extended more certainly to control or check these monopolies or trusts should be done without delay. Whatever power the Congress possesses over this most important subject should be promptly ascertained and asserted.

President Harrison, in his annual message of Dec. 3, 1889, says:

"Earnest attention should be given by Congress to a consideration of the question how the restraint of those combinations of capital commonly called 'trusts' is a matter of Federal jurisdiction. When organized, as they often are, to crush out all healthy competition and to monopolize the production or sale of an article of commerce and general necessity, they are dangerous conspiracies against the public good, and should be made the subject of prohibitory and even punitive legislation."

An act to protect trade and commerce against unlawful restraints and monopolies was passed by Congress on the 2d of July, 1890. The provisions of this statute are comprehensive and stringent. It declares every contract or combination, in the form of a trust or otherwise, or conspiracy in the restraint of trade or commerce among the several States or with foreign nations to be unlawful. It denominates as a criminal offense every person who makes any such contract or engages in any such combination or conspiracy, and provides a punishment by fine or imprisonment. It invests the several circuit courts of the United States with jurisdiction to prevent and restrain violations of the act, and makes it the duty of the several United States district attorneys, under the direction of the Attorney-General, to institute proceedings in equity to prevent

to restrain such violations. 'It further confers on any person who shall be injured in his business or property by any other person or corporation by reason of anything forbidden or declared to be unlawful by the act the power to sue therein any circuit court of the United States without respect to the amount in controversy, and to recover threefold the damages by him sustained and the costs of the suit, including reasonable attorney fees. It will be perceived that the act aimed at every kind of combination in the nature of a trust or monopoly in restraint of interstate or international commerce.

The prosecution by the United States of offenses under the act of 1890 has been frequently resorted to in the Federal courts, and notable results in the restraint of interstate commerce, such as the Trans-Missouri Freight Association and the Joint Traffic Association, have been successfully opposed and suppressed.

President Cleveland in his annual message of Dec. 7, 1896—more than six years subsequent to the enactment of this law—after stating the evils of these trust combinations, says:

Though Congress has attempted to deal with this matter by legislation, the laws passed for that purpose thus far have proved ineffective, not because of any lack of disposition or attempt to enforce them, but simply because the laws themselves as interpreted by the courts do not reach the difficulty. If the insufficiencies of existing laws can be remedied by further legislation, it could be done. The fact must be recognized, however, that all Federal legislation on this subject may fall short of its purpose because of inherent obstacles, and also because of the complex character of our governmental system, which, while making the Federal authority supreme within its sphere, has carefully limited that sphere by metes and bounds which can not be transgressed. The decision of our highest court on this precise question renders it quite doubtful whether the evils of trusts and monopolies can be adequately treated through Federal action, unless they seek directly and purposely to include in their objects transportation or intercourse between States or between the United States and foreign countries.

It does not follow, however, that this is the limit of the remedy that may be applied. Even though it may be found that Federal authority is not broad enough to fully reach the case, there can be no doubt of the power of the several States to act effectively in the premises, and there should be no reason to doubt their willingness to judiciously exercise such power."

The State legislation to which President Cleveland looked for relief from the evils of trusts has failed to accomplish fully that object. This is probably due to a great extent to the fact that different States take different views as to the proper way to discriminate between evil and injurious combinations and those associations which are beneficial and necessary to the business prosperity of the country. The great diversity of treatment in different States arising from this cause and the intimate relations of all parts of the country to each other without regarding State lines in the conduct of business have made the enforcement of State laws difficult.

It is apparent that uniformity of legislation on this subject in the several States is much to be desired. It is to be hoped that such uniformity, founded in a wise and just discrimination between what is injurious and what is useful and necessary in business operations may be obtained and that means may be found for the Congress

within the limitations of its constitutional power so to supplement an effective code of State legislation as to make a complete system of laws throughout the United States adequate to compel a general observance of the salutary rules to which I have referred.

The whole question is so important and far-reaching that I am sure no part of it will be lightly considered, but every phase of it will have the studied deliberation of the Congress, resulting in wise and judicious action.

A review of our relations with foreign states is presented with such recommendations as are deemed appropriate.

The long-pending boundary dispute between the Argentine Republic and Chili was settled in March last by the award of an arbitral commission, on which the United States minister at Buenos Ayres served as umpire.

Progress has been made toward the conclusion of a convention of extradition with the Argentine Republic. Having been advised and consented to by the United States Senate and ratified by Argentina, it only awaits the adjustment of some slight changes in the text before exchange.

In my last annual message I adverted to the claim of the Austro-Hungarian Government for indemnity for the killing of certain Austrian and Hungarian subjects by the authorities of the State of Pennsylvania, at Lattimer, while suppressing an unlawful tumult of miners, Sept. 10, 1897. In view of the verdict of acquittal rendered by the court before which the sheriff and his deputies were tried for murder, and following the established doctrine that the Government may not be held accountable for injuries suffered by individuals at the hands of the public authorities while acting in the line of duty in suppressing disturbance of the public peace, this Government, after due consideration of the claim advanced by the Austro-Hungarian Government, was constrained to decline liability to indemnify the sufferers.

It is gratifying to be able to announce that the Belgian Government has mitigated the restrictions on the importation of cattle from the United States, to which I referred in my last annual message.

Having been invited by Belgium to participate in a congress, held at Brussels, to revise the provisions of the general act of July 2, 1890, for the repression of the African slave trade, to which the United States was a signatory party, this Government preferred not to be represented by a plenipotentiary, but reserved the right of accession to the result. Notable changes were made, those especially concerning this country being in the line of the increased restriction of the deleterious trade in spirituous liquors with the native tribes, which this Government has from the outset urgently advocated. The amended general act will be laid before the Senate, with a view to its advice and consent.

Early in the year the peace of Bolivia was disturbed by a successful insurrection. The United States minister remained at his post, attending to the American interests in that quarter, and using besides his good offices for the protection of the interests of British subjects in the absence of their national representative. On the establishment of the new Government our minister was directed to enter into relations therewith.

Gen. Pando was elected President of Bolivia on Oct. 23.

Our representative has been instructed to use all permissible friendly endeavors to induce the Government of Bolivia to amend its marriage laws

so as to give legal status to the non-Catholic and civil marriages of aliens within its jurisdiction, and strong hopes are entertained that the Bolivian law in this regard will be brought, as was that of Peru some years ago, into harmony with the general practice of modern states.

A convention of extradition with Brazil, signed May 14, 1897, has been ratified by the Brazilian Legislature.

During the past summer two national ships of the United States have visited Brazilian ports on a friendly mission and been cordially received. The voyage of the Wilmington up the Amazon river gave rise to a passing misunderstanding, owing to confusion in obtaining permission to visit the interior and make surveys in the general interest of navigation, but the incident found a ready adjustment in harmony with the close relations of amity which this Government has always sedulously sought to cultivate with the commonwealths of the Western Continent.

The claim growing out of the seizure of the American-owned newspaper *The Panama Star and Herald* by the authorities of Colombia has been settled, after a controversy of several years, by an agreement assessing at \$30,000 the indemnity to be paid by the Colombian Government, in three installments of \$10,000 each.

The good will of Colombia toward our country has been testified anew by the cordial extension of facilities to the Nicaraguan Canal Commission in their approaching investigation of the Panama Canal and other projected routes across the Isthmus of Darien.

Toward the end of October an insurrectionary disturbance developed in the Colombian Republic. This movement has thus far not attained any decisive result and is still in progress.

Discussion of the questions raised by the action of Denmark in imposing restrictions on the importation of American meats has continued without substantial result in our favor.

The neighboring island republic of Santo Domingo has lately been the scene of revolution, following a long period of tranquillity. It began with the killing of President Heurieux in July last, and culminated in the relinquishment by the succeeding Vice-President of the reins of government to the insurgents. The first act of the Provisional Government was the calling of a presidential and constituent election. Juan Isidro Jimenez, having been elected President, was inaugurated on the 14th of November. Relations have been entered into with the newly established Government.

The experimental association of Nicaragua, Honduras, and Salvador, under the title of the Greater Republic of Central America, when apparently on the threshold of a complete federal organization by the adoption of a constitution and the formation of a national legislature, was disrupted in the last days of November, 1898, by the withdrawal of Salvador. Thereupon Nicaragua and Honduras abandoned the joint compact, each resuming its former independent sovereignty. This was followed by the reception of Minister Merry by the republics of Nicaragua and Salvador, while Minister Hunter in turn presented his credentials to the Government of Honduras, thus reverting to the old distribution of the diplomatic agencies of the United States in Central America for which our existing statutes provide. A Nicaraguan envoy has been accredited to the United States.

An insurrectionary movement, under Gen. Reyes, broke out at Bluefields in February last, and for a time exercised actual control in the Mosquito Territory. The Detroit was promptly

sent thither for the protection of American interests. After a few weeks the Reyes government renounced the conflict, giving place to the restoration of the supremacy of Nicaragua. During the interim certain public dues accruing under Nicaraguan law were collected from American merchants by the authorities for the time being in effect administrative control. Upon the titular government regaining power a second payment of the dues was demanded. Controversy arose touching the validity of the original payment of the dues to the *de facto* regent of the territory. An arrangement was effected in April last by the United States minister and the Foreign Secretary of Nicaragua whereby the amounts of the duplicate payments were deposited with the British consular authorities pending an adjustment of the matter by direct agreement between the governments of the United States and Nicaragua. The controversy is as yet unsettled.

The contract of the Maritime Canal Company of Nicaragua was declared forfeited by the Nicaraguan Government on the 10th of October, on the ground of nonfulfillment within the ten year term stipulated in the contract. The Maritime Canal Company has lodged a protest against this action, alleging rights in the premises which appear worthy of consideration. This Government expects that Nicaragua will afford the protestant a full and fair hearing upon the merits of the case.

The Nicaragua Canal Commission, which has been engaged upon the work of examination and survey for a ship-canal route across Nicaragua, having completed its labors and made its report, was dissolved on May 31, and on June 10 a new commission, known as the Isthmian Canal Commission, was organized under the terms of an act approved March 3, 1899, for the purpose of examining the American isthmus with a view to determining the most practicable and feasible route for a ship canal across that isthmus, with its probable cost, and other essential details.

This commission, under the presidency of Rear Admiral John G. Walker, U. S. N. (retired), entered promptly upon the work intrusted to it and is now carrying on examinations in Nicaragua along the route of the Panama Canal, and from Darien from the Atlantic, in the neighborhood of the Atrato river, to the Bay of Panama, on the Pacific side. Good progress has been made, under the law a comprehensive and complete investigation is called for, which will require much labor and considerable time for its accomplishment. The work will be prosecuted as expeditiously as possible and a report made at the earliest practicable date.

The great importance of this work cannot be too often or too strongly pressed upon the attention of the Congress. In my message of a year ago I expressed my views of the necessity of a canal which would link the two great oceans, and which I again invite your consideration. Reasons then presented for early action are even stronger now.

A pleasing incident in the relations of this Government with that of Chili occurred in the generous assistance given to the war ship *New York* when in distress in Chilian waters. Not alone this way has the friendly disposition of Chili found expression. That country has acceded to the convention for the establishment of the Bureau of the American Republics, in which organization every independent state of the continent now shares.

The exchange of ratifications of a convention for the revival of the United States and Chili

claims Commission and for the adjudication of claims heretofore presented but not determined during the life of the previous commission has been delayed by reason of the necessity for fresh action by the Chilean Senate upon the amendments attached to the ratification of the treaty with the United States Senate. This formality is now to be accomplished.

In view of disturbances in the populous provinces of northern China, where are many of our citizens, and of the imminence of disorder near the capital and toward the seaboard, a guard of marines was landed from the Boston and stationed during last winter in the legation command at Peking. With the restoration of order the protection was withdrawn.

The interests of our citizens in that vast empire have not been neglected during the past year. Adequate protection has been secured for our missionaries and some injuries to their property have been redressed.

American capital has sought and found various opportunities of competing to carry out the internal improvements which the Imperial Government is wisely encouraging, and to develop the natural resources of the empire. Our trade with China has continued to grow, and our commercial relations under existing treaties have been everywhere maintained during the past year, as they will be in the future.

The extension of the area open to international foreign settlement at Shanghai and the opening of ports at Nanking, Tsing-Tao (Kiao-Chao), and Lien-Wan to foreign trade and settlement will doubtless afford American enterprise additional facilities and new fields, of which it will not be slow to take advantage.

In my message to Congress of Dec. 5, 1898, I recommended that the recommendation which had been made to the Speaker of the House of Representatives by the Secretary of the Treasury on the 10th of June, 1898, for an appropriation for a commission to study the commercial and industrial conditions in the Chinese Empire and report as to the opportunities for, and obstacles to, the engagements of markets in China for the raw products and manufactures of the United States, should receive at your hands the consideration which its importance and timeliness merited, but Congress failed to take action.

I now renew this recommendation, as the importance of the subject has steadily grown since it was first submitted to you, and no time should be lost in studying for ourselves the resources of this great field for American trade and enterprise. The death of President Faure in February last afforded forth those sincere expressions of sympathy which befit the relations of two republics as closely allied by unbroken historic ties as are the United States and France.

Preparations for the representation of the industries, arts, and products of the United States at the World's Exposition to be held in Paris next year continue on an elaborate and comprehensive scale, thanks to the generous appropriation provided by Congress, and to the friendly interest the French Government has shown in cherishing a typical exhibit of American progress. There has been allotted to the United States a considerable addition of space, which, while placing our country in the first rank among exhibitors, does not suffice to meet the increasingly urgent demands of our manufacturers. The efforts of the commissioner general are ably directed toward a strictly representative display of all the most characteristically American achievement in the inventive arts, and most ade-

quately shows the excellence of our natural productions.

In this age of keen rivalry among nations for mastery in commerce, the doctrine of evolution and the rule of the survival of the fittest must be as inexorable in their operation as they are positive in the results they bring about. The place won in the struggle by an industrial people can only be held by unrelaxed endeavor and constant advance in achievement. The present extraordinary impetus in every line of American exportation and the astounding increase in the volume and value of our share in the world's markets may not be attributed to accidental conditions.

The reasons are not far to seek. They lie deep in our national character and find expression year by year in every branch of handicraft, in every new device whereby the materials we so abundantly produce are subdued to the artisan's will and made to yield the largest, most practical, and most beneficial return. The American exhibit at Paris should, and I am confident will, be an open volume, whose lessons of skillfully directed endeavor, unfaltering energy, and consummate performance may be read by all on every page, thus spreading abroad a clearer knowledge of the worth of our productions and the justice of our claim to an important place in the marts of the world. To accomplish this by judicious selection, by recognition of paramount merit in whatever walk of trade or manufacture it may appear, and by orderly classification and attractive installation is the task of our commission.

The United States Government building is approaching completion, and no effort will be spared to make it worthy, in beauty of architectural plan and in completeness of display, to represent our nation. It has been suggested that a permanent building of similar or appropriate design be erected on a convenient site, already given by the municipality, near the exposition grounds, to serve in commemoration of the part taken by this country in this great enterprise, as an American National Institute, for our countrymen resorting to Paris for study.

I am informed by our commissioner general that we shall have in the American sections at Paris over 7,000 exhibitors, from every State in our country, a number ten times as great as those which were represented at Vienna in 1873, six times as many as those in Paris in 1878, and four times as many as those who exhibited in Paris in 1889. This statement does not include the exhibitors from either Cuba, Porto Rico, or Hawaii, for which arrangements have been made.

A number of important international congresses on special topics affecting public interests are proposed to be held in Paris next summer in connection with the exposition. Effort will be made to have the several technical branches of our administration efficiently represented at those conferences, each in its special line, and to procure the largest possible concourse of State representatives, particularly at the Congresses of Public Charity and of Medicine.

Our relations with Germany continue to be most cordial. The increasing intimacy of direct association has been marked during the year by the granting permission in April for the landing on our shores of a cable from Borkum Emden, on the North Sea, by way of the Azores, and also by the conclusion on Sept. 2 of a Parcels Post Convention with the German Empire. In all that promises closer relations of intercourse and commerce and a better understanding between two races having so many traits in common, Germany

can be assured of the most cordial co-operation of this Government and people. We may be rivals in many material paths, but our rivalry should be generous and open, ever aiming toward the attainment of larger results and the mutually beneficial advancement of each in the line of its especial adaptabilities.

The several governments of the empire seem reluctant to admit the natural excellence of our food productions and to accept the evidence we constantly tender of the care with which their purity is guarded by rigid inspection from the farm, through the slaughterhouse and the packing establishments, to the port of shipment. Our system of control over exported food staples invites examination from any quarter and challenges respect by its efficient thoroughness.

It is to be hoped that in time the two governments will act in common accord toward the realization of their common purpose to safeguard the public health and to insure the purity and wholesomeness of all food products imported by either country from the other. Were the Congress to authorize an invitation to Germany, in connection with the pending reciprocity negotiations, for the constitution of a joint commission of scientific experts and practical men of affairs to conduct a searching investigation of food production and exportation in both countries and report to their respective legislatures for the adoption of such remedial measures as they might recommend for either, the way might be opened for the desirable result indicated.

Efforts to obtain for American life insurance companies a full hearing as to their business operations in Prussia have, after several years of patient representation, happily succeeded, and one of the most important American companies has been granted a concession to continue business in that kingdom.

I am also glad to announce that the German insurance companies have been readmitted by the superintendent of insurance to do business in the State of New York.

Subsequent to the exchange of our peace treaty with Spain Germany acquired the Caroline Islands by purchase, paying therefor \$5,000,000. Assurances have been received from the German Government that the rights of American missionaries and traders there will be considerately observed.

In my last annual message I referred to the pending negotiations with Great Britain in respect to the Dominion of Canada. By means of an executive agreement a joint high commission had been created for the purpose of adjusting all unsettled questions between the United States and Canada, embracing twelve subjects, among which were the questions of the fur seals, the fisheries of the coast and contiguous inland waters, the Alaskan boundary, the transit of merchandise in bond, the alien labor laws, mining rights, reciprocity in trade, revision of the agreement respecting naval vessels in the Great Lakes, a more complete marking of parts of the boundary, provision for the conveyance of criminals, and for wrecking and salvage.

Much progress had been made by the commission toward the adjustment of many of these questions, when it became apparent that an irreconcilable difference of views was entertained respecting the delimitation of the Alaskan boundary. In the failure of an agreement as to the meaning of Articles III and IV of the treaty of 1825 between Russia and Great Britain, which defined the boundary between Alaska and Canada, the American commissioners proposed that the

subject of the boundary be laid aside and that the remaining questions of difference be proceeded with, some of which were so far advanced as to assure the probability of a settlement. This being declined by the British commissioners, an adjournment was taken until the boundary should be adjusted by the two governments. The subject has been receiving the careful attention which its importance demands, with the result that a *modus vivendi* for provisional demarcations in the region about the head of Lynn Canal has been agreed upon; and it is hoped that the negotiations now in progress between the two governments will end in an agreement for the establishment and delimitation of a permanent boundary.

Apart from these questions growing out of our relationship with our northern neighbor, the most friendly disposition and ready agreement have marked the discussion of numerous matters arising in the vast and intimate intercourse of the United States with Great Britain.

This Government has maintained an attitude of neutrality in the unfortunate contest between Great Britain and the Boer states of Africa. We have remained faithful to the precept of avoiding entangling alliances as to affairs not of our direct concern. Had circumstances suggested that the parties to the quarrel would have welcomed any kindly expression of the hope of the American people that war might be averted, good offices would have been gladly tendered. The United States representative at Pretoria was early instructed to see that all neutral American interests be respected by the combatants. This has been an easy task in view of the positive declarations of both British and Boer authorities that the personal and property rights of our citizens should be observed.

Upon the withdrawal of the British agent from Pretoria the United States consul was authorized, upon the request of the British Government and with the assent of the South African and Orange Free State governments, to exercise the customary good offices of a neutral for the care of British interests. In the discharge of this function I am happy to say that abundant opportunity has been afforded to show the impartiality of this Government toward both the combatants.

For the fourth time in the present decade question has arisen with the Government of Italy in regard to the lynching of Italian subjects. The latest of these deplorable events occurred at Tal-lulah, La., whereby five unfortunates of Italian origin were taken from jail and hanged.

The authorities of the State and a representative of the Italian embassy having separately investigated the occurrence, with discrepant results, particularly as to the alleged citizenship of the victims, and it not appearing that the State had been able to discover and punish the violators of the law, an independent investigation has been set on foot, through the agency of the Department of State, and is still in progress. The result will enable the Executive to treat the question with the Government of Italy in a spirit of fairness and justice. A satisfactory solution will doubtless be reached.

The recurrence of these distressing manifestations of blind mob fury directed at dependents or natives of a foreign country suggests that the contingency has arisen for action by Congress in the direction of conferring upon the Federal courts jurisdiction in this class of international cases where the ultimate responsibility of the Federal Government may be involved. The suggestion is not new. In his annual message of Dec. 9, 1891, my predecessor, President Harrison, said:

'It would, I believe, be entirely competent for Congress to make offenses against the treaty rights of foreigners domiciled in the United States cognizable in the Federal courts. This has not, however, been done, and the Federal officers and courts have no power in such cases to intervene either for the protection of a foreign citizen or for the punishment of his slayers. It seems to me to follow, in this state of the law, that the officers of the State charged with police and judicial powers in such cases must, in the consideration of international questions growing out of such incidents, be regarded in such sense as Federal agents as to make this Government answerable for their acts in cases where it would be answerable if the United States had used its constitutional power to define and punish crimes against treaty rights."

A bill to provide for the punishment of violations of treaty rights of aliens was introduced in the Senate, March 1, 1892, and reported favorably March 30. Having doubtless in view the language of that part of Article III of the treaty of Feb. 26, 1871, between the United States and Italy which stipulates that "the citizens of each the high contracting parties shall receive, in the States and Territories of the other, most constant protection and security for their persons and property, and shall enjoy in this respect the same rights and privileges as are or shall be granted to the natives, on their submitting themselves to the conditions imposed upon the natives," the bill so introduced and reported provided that any act committed in any State or Territory of the United States in violation of the rights of a citizen or subject of a foreign country secured to such citizen or subject by treaty between the United States and such foreign country and constituting a crime under the laws of the State or Territory shall constitute a like crime against the United States and be cognizable in the Federal courts. No action was taken by Congress in the matter.

I earnestly recommend that the subject be taken up anew and acted upon during the present session. The necessity for some such provision abundantly appears. Precedent for constituting Federal jurisdiction in criminal cases where aliens are sufferers is rationally deducible from the existing statute, which gives to the district and circuit courts of the United States jurisdiction of civil suits brought by aliens where the amount involved exceeds a certain sum. If such anxious solicitude be shown for alien rights in cases of merely civil and pecuniary import, how much greater should be the public duty to take cognizance of matters affecting the life and the rights of aliens under the settled principles of international law no less than under treaty stipulations, in cases of such transcendent wrongdoing as mob murder, especially when experience has shown that local justice is too often helpless to punish the offenders.

After many years of endeavor on the part of the Government to that end the Italian Government has consented to enter into negotiations for a naturalization convention, having for one of its objects the regulation of the status of Italians except those of an age for active military service who, having been naturalized in the United States, may revisit Italy. It is hoped that with a mutually conciliatory spirit displayed a successful conclusion will be reached.

The treaty of commerce and navigation between the United States and Japan on Nov. 22, 1894, took effect in accordance with the terms of its nineteenth article on the 17th of July last, simul-

taneously with the enforcement of like treaties with the other powers, except France, whose convention did not go into operation until Aug. 4, the United States being, however, granted up to that date all the privileges and rights accorded to French citizens under the old French treaty. By this notable conventional reform Japan's position as a fully independent sovereign power is assured, control being gained of taxation, customs revenues, judicial administration, coasting trade, and all other domestic functions of government, and foreign extraterritorial rights being renounced.

Comprehensive codes of civil and criminal procedure according to Western methods, public instruction, patents and copyrights, municipal administration, including jurisdiction over the former foreign settlements, customs tariffs and procedure, public health, and other administrative measures have been proclaimed. The working of the new system has given rise to no material complaints on the part of the American citizens or interests, a circumstance which attests the ripe consideration with which the change has been prepared.

Valuable assistance was rendered by the Japanese authorities to the United States transport ship *Morgan City* while stranded at Kobe. Permission has been granted to land and pasture army horses at Japanese ports of call on the way to the Philippine Islands. These kindly evidences of good will are highly appreciated.

The Japanese Government has shown a lively interest in the proposition of the Pacific Cable Company to add to its projected cable lines to Hawaii, Guam, and the Philippines a branch connection with the coast of Japan. It would be a gratifying consummation were the utility of the contemplated scheme enhanced by bringing Japan and the United States into direct telegraphic relation.

Without repeating the observations of my special message of Feb. 10, 1899, concerning the necessity of a cable to Manila, I respectfully invite attention to it.

I recommend that, in case the Congress should not take measures to bring about this result by direct action of the Government, the Postmaster-General be authorized to invite competitive bids for the establishment of a cable; the company making the best responsible bid to be awarded the contract; the successful company to give ample bonds to insure the completion of the work within a reasonable time.

The year has been marked by constant increase in the intimacy of our relations with Mexico and in the magnitude of mutually advantageous interchanges. This Government has omitted no opportunity to show its strong desire to develop and perpetuate the ties of cordiality now so long happily unbroken.

Following the termination on Jan. 20, 1899, by Mexico of the convention of extradition of Dec. 11, 1861, a new treaty more in accordance with the ascertained needs of both countries was signed Feb. 22, 1899, and exchanged in the city of Mexico on the 22d of April last. Its operation thus far has been effective and satisfactory. A recent case has served to test the application of its fourth article, which provides that neither party shall be bound to deliver up its own citizens, but that the executive authority of each shall have the power to deliver them up if in its discretion it be deemed proper to do so.

The extradition of Mrs. Mattie Rich, a citizen of the United States, charged with homicide committed in Mexico, was after mature consideration

directed by me in the conviction that the ends of justice would be thereby subserved. Similar action, on appropriate occasion, by the Mexican Executive will not only tend to accomplish the desire of both governments that grave crimes go not unpunished, but also to repress lawlessness along the border of the two countries. The new treaty stipulates that neither government shall assume jurisdiction in the punishment of crimes committed exclusively within the territory of the other. This will obviate in future the embarrassing controversies which have heretofore arisen through Mexico's assertion of a claim to try and punish an American citizen for an offense committed within the jurisdiction of the United States.

The International Water Boundary Commission, organized by the convention of March 1, 1889, for the adjustment of questions affecting the Rio Grande frontier, has not yet completed its labors. A further extension of its term for one year, until Dec. 24, 1890, was effected by a convention signed Dec. 2, 1898, and exchanged and proclaimed in February last.

An invitation extended to the President of Mexico to visit Chicago in October, on the occasion of laying the corner stone of the United States Government building in that city, was cordially accepted by him, with the necessary consent of the Mexican Congress, but the illness of a member of his family prevented his attendance. The Minister of Foreign Relations, however, came as the personal representative of President Diaz, and in that high character was duly honored.

Claims growing out of the seizure of American sealing vessels in Bering Sea have been under discussion with the Government of Russia for several years, with the recent happy result of an agreement to submit them to the decision of a single arbitrator. By this act Russia affords proof of her adherence to the beneficent principle of arbitration which her plenipotentiaries conspicuously favored at The Hague Disarmament Conference when it was advocated by the representatives of the United States.

A suggestion for a permanent exposition of our products and manufactures in Russia, although not yet fully shaped, has been so cordially welcomed by the Imperial Government that it may not inaptly take a fitting place in whatever legislation the Congress may adopt looking to enlargement of our commercial opportunities abroad.

Important events have occurred in the Samoan Islands. The election, according to the laws and customs of Samoa, of a successor to the late King, Malietoa Laupepa, developed a contest as to the validity of the result, which issue, by the terms of the general act, was to be decided by the Chief Justice. Upon his rendering a judgment in favor of Malietoa Tanu, the rival chief, Mataafa, took up arms. The active intervention of American and British war ships became imperative to restore order, at the cost of sanguinary encounters. In this emergency a joint commission of representatives of the United States, Germany, and Great Britain was sent to Samoa to investigate the situation and provide a temporary remedy. By its active efforts a peaceful solution was reached for the time being, the kingship being abolished and a provisional government established. Recommendations unanimously made by the commission for a permanent adjustment of the Samoan question were taken under consideration by the three powers parties to the general act. But the more they were examined the more evident it became that a radical change was necessary in the relations of the powers to Samoa.

The inconveniences and possible perils of a tripartite scheme of supervision and control in a Samoan group by powers having little interest common in that quarter beyond commercial value had been once more emphasized by the recent events. The suggested remedy of the joint commission, like the scheme it aimed to replace, amounted to what has been styled a *tridominium*, being the exercise of the functions of sovereignty by a unanimous agreement of three powers. The situation had become far more intricate and embarrassing from every point of view than it was when my predecessor, in 1894, summed up the perplexities and condemned the participation in it of the United States.

The arrangement under which Samoa was administered had proved impracticable and unacceptable to all the powers concerned. To withdraw from the agreement and abandon the island to Germany and Great Britain would not be compatible with our interests in the archipelago. To relinquish our rights in the harbor of Pago Pago, the best anchorage in the Pacific, the occupation of which had been leased to the United States in 1878 by the first foreign treaty ever concluded with Samoa, was not to be thought of either as regarding the needs of our navy or the interests of our growing commerce with the East. We could not have considered any proposition for the abrogation of the tripartite control which did not confirm us in all our rights and safeguard all our national interests in the islands.

Our views commended themselves to the other powers. A satisfactory arrangement was concluded between the governments of Germany and Great Britain, by virtue of which England retired from Samoa in view of compensations in other directions, and both powers renounced in favor of the United States all their rights and claims on and in respect to that portion of the group lying to the east of the one hundred and seventy-fifth degree of west longitude, embracing the islands of Tutuila, Ofu, Olosenga, and Manua. I transmit to the Senate, for its constitutional action thereon, a convention, which besides the provisions above mentioned also guarantees us the same privileges and conditions in respect to commerce and commercial vessels in all of the islands of Samoa as those possessed by Germany.

Claims have been preferred by white residents of Samoa on account of injuries alleged to have been suffered through the acts of the treaty governments in putting down the late disturbances. A convention has been made between the three powers for the investigation and settlement of these claims by a neutral arbitrator, to which attention of the Senate will be invited.

My annual message of last year was necessarily devoted in great part to a consideration of the Spanish war and of the results it wrought and conditions it imposed for the future. I am gratified to announce that the treaty of peace has restored friendly relations between the two powers. Effect has been given to its most important provisions. The evacuation of Porto Rico having already been accomplished on the 18th of October, 1898, nothing remained necessary there but to continue the provisional military control of the island until the Congress should enact a suitable government for the ceded territory. Of the character and scope of the measures to that end shall treat in another part of this message.

The withdrawal of the authority of Spain from the island of Cuba was effected by the 1st of January, so that the full re-establishment of peace was found the relinquished territory held by us in trust for the inhabitants, maintaining, under

tion of the Executive, such government and control therein as should conserve public order, and secure the productive conditions of peace so long as disturbed by the instability and disorder which have prevailed for the greater part of the preceding decades, and build up that tranquil development of the domestic state whereby alone can be realized the high purpose, as proclaimed in the resolution adopted by the Congress on the 4th of April, 1898, by which the United States claimed any disposition or intention to exercise sovereignty, jurisdiction, or control over Cuba, except for the pacification thereof, and assented its determination when that was accomplished to leave the government and control of the island to its people. The pledge contained in this resolution is of the highest honorable obligation and must be sacredly kept.

We believe that substantial progress has been made in this direction. All the administrative measures adopted in Cuba have aimed to fit it for a self-generated existence by enforcing the supremacy of law and justice; by placing wherever practicable the machinery of administration in the hands of the inhabitants; by instituting sanitary reforms; by spreading education; by fostering industry and trade; by inculcating civic morality, and, in short, by taking every rational step to aid the Cuban people to attain to that plane of self-conscious respect and self-reliance which fits an enlightened community for government within its own sphere, while enabling it to fulfill all outward obligations.

This nation has assumed before the world a responsibility for the future good government of Cuba. We have accepted a trust the fulfillment of which calls for the sternest integrity of purpose and the exercise of the highest wisdom. No new Cuba yet to arise from the ashes of the old must needs be bound to us by ties of singular intimacy and strength if its enduring welfare is to be assured. Whether those ties shall be organic or conventional, the destinies of Cuba are in the rightful form and manner irrevocably linked to our own, but how and how far is for the future to determine in the ripeness of events. Whatever be the outcome, we must see to it that Cuba be a reality, not a name; a perfect end, not a hasty experiment bearing within itself the elements of failure. Our mission, to accomplish which we took up the wager of battle, is not fulfilled by turning adrift any loosely framed Commonwealth to face the vicissitudes which too often attend weaker states whose natural wealth and abundant resources are offset by the inconcinnities of their political organization and the recurring occasions for internal rivalries to sap strength and dissipate their energies. The greatest blessing which can come to Cuba is the liberation of her agricultural and industrial capacity, which will give employment to idle hands and re-establish the pursuits of peace. This is our chief and immediate need.

On the 19th of August last an order was made for the taking of the census in the island, to be completed on the 30th of November. By the treaty of peace the Spanish people on the island until April 11, 1900, to elect whether they remain citizens of Spain or become citizens of the United States. Until then it can not be definitely ascertained who shall be entitled to participate in the election of the government of Cuba. By that time the results of the census will have been tabulated and we shall proceed to provide for elections which will commit the municipal governments of the island to the officers elected by the people. Our experience thus acquired will prove of great

value in the formation of a representative convention of the people to draft a constitution and establish a general system of independent government for the island. In the meantime and so long as we exercise control over the island the products of Cuba should have a market in the United States on as good terms and with as favorable rates of duty as are given to the West India Islands under treaties of reciprocity which shall be made.

For the relief of the distressed in the island of Cuba the War Department has issued supplies to destitute persons through the officers of the army, which have amounted to 5,493,000 rations, at a cost of \$1,417,554.07.

To promote the disarmament of the Cuban volunteer army, and in the interest of public peace and the welfare of the people, the sum of \$75 was paid to each Cuban soldier borne upon the authenticated rolls, on condition that he should deposit his arms with the authorities designated by the United States. The sum thus disbursed aggregated \$2,547,750, which was paid from the emergency fund provided by the act of Jan. 5, 1899, for that purpose.

Out of the Cuban island revenues during the six months ending June 30, 1899, \$1,712,014.20 was expended for sanitation, \$293,881.70 for charities and hospitals, and \$88,944.03 for aid to the destitute.

Following the exchange of ratifications of the treaty of peace the two governments accredited ministers to each other, Spain sending to Washington the Duke of Arcos, an eminent diplomatist, previously stationed in Mexico, while the United States transferred to Madrid Hon. Bellamy Storer, its minister at Brussels. This was followed by the respective appointment of consuls, thereby fully resuming the relations interrupted by the war. In addition to its consular representation in the United States, the Spanish Government has appointed consuls for Cuba, who have been provisionally recognized during the military administration of the affairs of that island.

Judicial intercourse between the courts of Cuba and Porto Rico and of Spain has been established, as provided by the treaty of peace. The Cuban political prisoners in Spanish penal stations have been and are being released and returned to their homes, in accordance with Article VI of the treaty. Negotiations are about to be had for defining the conventional relations between the two countries, which fell into abeyance by reason of the war. I trust that these will include a favorable arrangement for commercial reciprocity under the terms of sections 3 and 4 of the current tariff act. In these, as in all matters of international concern, no effort will be spared to respond to the good disposition of Spain, and to cultivate in all practicable ways the intimacy which should prevail between two nations whose past history has so often and in so many ways been marked by sincere friendship and by community of interests.

I would recommend appropriate legislation in order to carry into execution Article VII of the treaty of peace with Spain, by which the United States assured the payment of certain claims for indemnity of its citizens against Spain.

The United States minister to Turkey continues, under instructions, to press for a money payment in satisfaction of the just claims for injuries suffered by American citizens in the disorders of several years past and for wrongs done to them by the Ottoman authorities. Some of these claims are of many years' standing. This

Government is hopeful of a general agreement in this regard.

In the Turkish Empire the situation of our citizens remains unsatisfactory. Our efforts during nearly forty years to bring about a convention of naturalization seem to be on the brink of final failure through the announced policy of the Ottoman Porte to refuse recognition of the alien status of native Turkish subjects naturalized abroad since 1867. Our statutes do not allow this Government to admit any distinction between the treatment of native and naturalized Americans abroad, so that ceaseless controversy arises in cases where persons owing in the eye of international law a dual allegiance are prevented from entering Turkey or are expelled after entrance. Our law in this regard contrasts with that of the European states. The British act, for instance, does not claim effect for the naturalization of an alien in the event of his return to his native country, unless the change be recognized by the law of that country or stipulated by treaty between it and the naturalizing state.

The arbitrary treatment, in some instances, of American productions in Turkey has attracted attention of late, notably in regard to our flour. Large shipments by the recently opened direct steamship line to Turkish ports have been denied entrance on the score that, although of standard composition and unquestioned purity, the flour was pernicious to health because of deficient "elasticity," as indicated by antiquated and untrustworthy tests. Upon due protest by the American minister, and it appearing that the act was a virtual discrimination against our product, the shipments in question were admitted. In these, as in all instances, wherever occurring, when American products may be subjected in a foreign country, upon specious pretexts, to discrimination compared with the like products of another country, this Government will use its earnest efforts to secure fair and equal treatment for its citizens and their goods. Failing this, it will not hesitate to apply whatever corrective may be provided by the statutes.

The International Commission of Arbitration, appointed under the Anglo-Venezuelan treaty of 1897, rendered an award on Oct. 3 last, whereby the boundary line between Venezuela and British Guiana is determined, thus ending a controversy which has existed for the greater part of the century. The award, as to which the arbitrators were unanimous, while not meeting the extreme contention of either party, gives to Great Britain a large share of the interior territory in dispute and to Venezuela the entire mouth of the Orinoco, including Barima Point and the Caribbean littoral for some distance to the eastward. The decision appears to be equally satisfactory to both parties.

Venezuela has once more undergone a revolution. The insurgents, under General Castro, after a sanguinary engagement in which they suffered much loss, rallied in the mountainous interior and advanced toward the capital. The bulk of the army having sided with the movement, President Andrade quitted Caracas, where General Castro set up a provisional government with which our minister and the representatives of other powers entered into diplomatic relations on the 20th of November, 1899.

The fourth section of the tariff act approved July 24, 1897, appears to provide only for commercial treaties which should be entered into by the President and also ratified by the Senate within two years from its passage. Owing to delays inevitable in negotiations of this nature,

none of the treaties initiated under that section could be concluded in time for ratification by the Senate prior to its adjournment on the 4th of March last. Some of the pending negotiations, however, were near conclusion at that time, and the resulting conventions have since been signed by the plenipotentiaries. Others, within both the third and fourth sections of the act, are still under considerations. Acting under the constitutional power of the Executive in respect to treaties, I have deemed it my duty, while observing the limitations of concession provided by the fourth section, to bring to a conclusion all pending negotiations, and submit them to the Senate for its advice and consent.

Conventions of reciprocity have been signed during the congressional recess with Great Britain for the respective colonies of Guiana, Barbados, Bermuda, Jamaica, and Turks' and Caicos islands, and with the republic of Nicaragua.

Important reciprocal conventions have also been concluded with France and with the Argentine Republic.

In my last annual message the progress noted in the work of the diplomatic and consular officers in collecting information as to the industries and commerce of other countries, and in the care and promptitude with which their reports are printed and distributed, has continued during the past year, with increasingly valuable results in suggesting new sources of demand for American products and in pointing out the obstacles still to be overcome in facilitating the remarkable expansion of our foreign trade. It will doubtless be gratifying to Congress to learn that the various agencies of the Department of State are co-operating in these endeavors with a zeal and effectiveness which are not only receiving the cordial recognition of our business interests, but are exciting the emulation of other governments. In any rearrangement of the great and complicated work of obtaining official data of an economic character which Congress may undertake it is most important, in my judgment, that the results already secured by the efforts of the Department of State should be carefully considered with a view to a judicious development and increased utility to our export trade.

The interest taken by the various states forming the International Union of American Republics in the work of its organic bureau is evidenced by the fact that for the first time since its creation in 1890 all the republics of South and Central America are now represented in it.

The unanimous recommendation of the International American Conference, providing for the International Union of American Republics, stated that it should continue in force during a term of ten years from the date of its organization, and no country becoming a member of the union should cease to be a member until the end of said period of ten years, and unless twelve months before the expiration of said period a majority of the members of the union had given to the Secretary of State of the United States official notice of their wish to terminate the union at the end of its first period, that the union should continue to be maintained for another period of ten years, and thereafter, under the same conditions, for successive periods of ten years each.

The period for notification expired on July 14, 1899, without any of the members having given the necessary notice of withdrawal. Its maintenance is therefore assured for the next ten years. In view of this fact and of the numerous questions of general interest and common benefit to all of the republics of America, some of which

were considered by the first International American Conference, but not finally settled, and others which have since then grown to importance, it would seem expedient that the various republics constituting the Union should be invited to hold at an early date another conference in the capital of one of the countries other than the United States, which has already enjoyed this honor.

The purely international character of the work being done by the bureau and the appreciation of its value are further emphasized by the active co-operation which the various governments of the Latin-American republics and their diplomatic representatives in this capital are now exhibiting and the zealous endeavors they are making to extend its field of usefulness, to promote through it commercial intercourse, and strengthen the bonds of amity and confidence between its various members and the nations of this continent.

The act to encourage the holding of the Pan-American Exposition on the Niagara frontier, within the county of Erie or Niagara, in the State of New York, in the year 1901, was approved on March 3, 1899.

This exposition, which will be held in the city of Buffalo, in the near vicinity of the great Niagara cataract, and within a day's journey of which reside 40,000,000 of our people, will be confined entirely to the Western Hemisphere. Satisfactory assurances have already been given by the diplomatic representatives of Great Britain, Mexico, the Central and South American republics, and most of the States of the United States that these countries and States will make an unique, interesting, and instructive exhibit, peculiarly illustrative of their material progress during the century which is about to close.

The law provides an appropriation of \$500,000 for the purpose of making an exhibit at the exposition by the Government of the United States from its executive departments and from the Smithsonian Institution and National Museum, the United States Commission of Fish and Fisheries, the Department of Labor, and the Bureau of the American Republics. To secure a complete and harmonious arrangement of this Government exhibit a board of management has already been created, and charged with the selection, purchase, preparation, transportation, arrangement, and safe-keeping of the articles and materials to be exhibited. This board has been organized and has already entered upon the performance of its duties, as provided for by the law.

I have every reason to hope and believe that this exposition will tend more firmly to cement the cordial relations between the nations on this continent.

In accordance with an act of Congress approved Dec. 21, 1898, and under the auspices of the Philadelphia Commercial Museum, a most interesting and valuable exposition of products and manufactures especially adapted to export trade was held in Philadelphia from the 14th of September to the 1st of December, 1899. The representative character of the exhibits and the widespread interest manifested in the special objects of the undertaking afford renewed encouragement to those who look confidently to the steady growth of our enlarged exportation of manufactured goods, which has been the most remarkable fact in the economic development of the United States in recent years. A feature of this exposition which is likely to become of permanent and increasing utility to our industries is the collection of samples of merchandise produced in various countries with special reference to particular markets, pro-

viding practical object lessons to United States manufacturers as to qualities, styles, and prices of goods such as meet the special demands of consumers and may be exported with advantage.

In connection with the exposition an International Commercial Congress was held, upon the invitation of the Philadelphia Commercial Museum, transmitted by the Department of State to the various foreign governments, for an exchange of information and opinions with the view to the promotion of international trade. This invitation met with general and cordial acceptance, and the Congress, which began its sessions at the exposition on the 13th of October, proved to be of great practical importance, from the fact that it developed a general recognition of the interdependence of nations in trade and a most gratifying spirit of accommodation with reference to the gradual removal of existing impediments to reciprocal relations, without injury to the industrial interests of either party.

In response to the invitation of his Majesty the Emperor of Russia, delegates from 26 countries were assembled at The Hague on the 18th of May, as members of a conference in the interest of peace. The commission from the United States consisted of the Hon. Andrew D. White, the Hon. Seth Low, the Hon. Stanford Newel, Capt. Alfred T. Mahan, of the United States navy, Capt. William Crozier, of the United States army, and the Hon. Frederick W. Holls, secretary. The occasion seemed to be opportune for the serious consideration of a plan for the pacific adjustment of international differences, a subject in which the American people have been deeply interested for many years, and a definite project for a permanent international tribunal was included in the instructions to the delegates of the United States.

The final act of the conference includes conventions upon the amelioration of the laws and customs of war on land, the adaptation to maritime warfare of the principles of the Geneva Convention of 1864, and the extension of judicial methods to international cases. The Convention for the Pacific Settlement of International Conflicts embodies the leading features of the American plan, with such modifications as were rendered necessary by the great diversity of views and interests represented by the delegates. The four titles of the convention provide for the maintenance of general peace, the exercise of good offices and mediation, the formation of commissions of inquiry, and international arbitration.

The mediation provided for by the convention is purely voluntary and advisory, and is intended to avoid any invasion or limitation of the sovereign rights of the adhering states. The commissions of inquiry proposed consist of delegations to be specifically constituted for particular purposes by means of conventions between the contending parties, having for their object the clear understanding of international differences before resorting to the use of force. The provision for arbitration contemplates the formation of a permanent tribunal before which disputed cases may be brought for settlement by the mutual consent of the litigants in each separate case. The advantages of such a permanent tribunal over impromptu commissions of arbitration are conceived to be the actual existence of a competent court, prepared to administer justice, the greater economy resulting from a well-devised system, and the accumulated judicial skill and experience which such a tribunal would soon possess.

While earnestly promoting the idea of establishing a permanent international tribunal, the delegation of the United States was not unmindful of

the inconveniences which might arise from an obtrusive exercise of mediation, and in signing the convention carefully guarded the historic position of the United States by the following declaration:

"Nothing contained in this convention shall be so construed as to require the United States of America to depart from its traditional policy of not intruding upon, interfering with, or entangling itself in the political questions or policy or internal administration of any foreign state; nor shall anything contained in the said convention be construed to imply a relinquishment by the United States of America of its traditional attitude toward purely American questions."

Thus interpreted, the Convention for the Pacific Settlement of International Conflicts may be regarded as realizing the earnest desire of great numbers of American citizens, whose deep sense of justice, expressed in numerous resolutions and memorials, has urged them to labor for this noble achievement. The general character of this convention, already signed by the delegates of more than 20 sovereign states, further commends it to the favorable action of the Senate of the United States, whose ratification it still awaits.

Since my last annual message, and in obedience to the acts of the Congress of April 22 and 26, 1898, the remaining volunteer force enlisted for the Spanish war, consisting of 34,834 regulars and 110,202 volunteers, with over 5,000 volunteer officers, has been discharged from the military service. Of the volunteers, 667 officers and 14,831 men were serving in the Philippines, and 1,650 of the regulars, who were entitled to be mustered out after the ratification of the treaty of peace. They voluntarily remained at the front until their places could be filled by new troops. They were returned home in the order in which they went to Manila, and are now all of them out of the service and in the ranks of citizenship. I recommend that the Congress provide a special medal of honor for the volunteers, regulars, sailors, and marines on duty in the Philippines who voluntarily remained in the service after their terms of enlistment had expired.

By the act of March 2, 1899, Congress gave authority to increase the regular army to a maximum not exceeding 65,000 enlisted men, and to enlist a force of 35,000 volunteers, to be recruited from the country at large. By virtue of this authority the regular army has been increased to the number of 61,999 enlisted men and 2,248 officers, and new volunteer regiments have been organized aggregating 33,050 enlisted men and 1,524 officers. Two of these volunteer regiments are made up of colored men, with colored line officers. The new troops to take the places of those returning from the Philippines have been transported to Manila to the number of 581 officers and 26,322 enlisted men of the regular army and 594 officers and 15,388 enlisted men of the new volunteer force, while 504 officers and 14,119 men of the volunteer force are on the ocean *en route* to Manila.

The force now in Manila consists of 905 officers and 30,578 regulars, and 594 officers and 15,388 of the volunteers, making an aggregate of 1,490 officers and 45,966 men. When the troops now under orders shall reach Manila the force in the archipelago will comprise 2,051 officers and 63,483 men. The muster out of the great volunteer army organized for the Spanish war and the creation of a new army, the transportation from Manila to San Francisco of those entitled to discharge, and the transportation of the new troops to take their places have been a work of great magnitude well and ably done, for which too much credit can not be given the War Department.

During the past year we have reduced our force

in Cuba and Porto Rico. In Cuba we now have 334 officers and 10,796 enlisted men; in Porto Rico, 87 officers and 2,855 enlisted men and a battalion of 400 men composed of native Porto Ricans; while stationed throughout the United States are 910 officers and 17,317 men, and in Hawaii 12 officers and 453 enlisted men.

The operations of the army are fully presented in the report of the Secretary of War. I can not withhold from officers and men the highest commendation for their soldierly conduct in trying situations, their willing sacrifices for their country, and the integrity and ability with which they have performed unusual and difficult duties in our island possessions.

In the organization of the volunteer regiments authorized by the act of March 2, 1899, it was found that no provision had been made for chaplains. This omission was doubtless from inadvertence. I recommend the early authorization for the appointment of one chaplain for each of said regiments. These regiments are now in the Philippines, and it is important that immediate action be had.

In restoring peaceful conditions, orderly rule, and civic progress in Cuba, Porto Rico, and, so far as practicable, in the Philippines, the rehabilitation of the postal service has been an essential and important part of the work. It became necessary to provide mail facilities both for our forces of occupation and for the native population. To meet this requirement has involved a substantial reconstruction. The existing systems were so fragmentary, defective, and inadequate that a new and comprehensive organization had to be created. American trained officials have been assigned to the directing and executive positions, while natives have been chiefly employed in making up the body of the force. In working out this plan the merit rule has been rigorously and faithfully applied.

The appointment of Director General of Posts of Cuba was given to an expert who had been Chief Post Office Inspector and Assistant Postmaster-General, and who united large experience with administrative capacity. For the postmastership at Havana the range of skilled and available men was scanned, and the choice fell upon one who had been twenty years in the service as deputy postmaster and postmaster of a large city. This principle governed and determined the selection of the American officials sent not only to Cuba, but to Porto Rico and the Philippines, and they were instructed to apply it so far as practicable in the employment of the natives as minor postmasters and clerks. The postal system in Cuba, though remaining under the general guidance of the Postmaster-General, was made essentially independent. It was felt that it should not be a burden upon the postal service of the United States, and provision was made that any deficit in the postal revenue should be a charge upon the general revenues of the island.

Though Porto Rico and the Philippines hold a different relation to the United States, yet, for convenience of administration, the same principle of an autonomous system has been extended to them. The development of the service in all of the islands has been rapid and successful. It has moved forward on American lines, with free delivery, money order, and registry systems, and has given the people mail facilities far greater and more reliable than any they have ever before enjoyed. It is thus not only a vital agency of industrial, social, and business progress, but an important influence in diffusing a just understanding of the true spirit and character of American administration.

The domestic postal service continues to grow with extraordinary rapidity. The expenditures and the revenues will each exceed \$100,000,000 during the current year. Fortunately, since the revival of prosperous times the revenues have grown much faster than the expenditures, and there is every indication that a short period will witness the obliteration of the annual deficit. In this connection the report of the Postmaster-General embodies a statement of some evils which have grown up outside of the contemplation of law in the treatment of some classes of mail matter which wrongly exercise the privilege of the pound rate, and shows that if this matter had been properly assessed and had paid the rate which it should have paid, instead of a postal deficit for the last fiscal year of \$6,610,000, there would have been on one basis a surplus of \$17,637,570, and on another of \$5,733,836. The reform thus suggested, in the opinion of the Postmaster-General, would not only put the postal service at once on a self-sustaining basis, but would permit great and valuable improvements, and I commend the subject to the consideration of the Congress.

The navy has maintained the spirit and high efficiency which have always characterized that service, and has lost none of the gallantry in heroic action which has signalized its brilliant and glorious past. The nation has equal pride in its early and later achievements. Its habitual readiness for every emergency has won the confidence and admiration of the country. The people are interested in the continued preparation and prestige of the navy and will justify liberal appropriations for its maintenance and improvement. The officers have shown peculiar adaptation for the performance of arduous and delicate duties which our recent war has imposed.

It can not be doubted that Congress will at once make necessary provision for the armor plate for the vessels now under contract and building. Its attention is respectfully called to the report of the Secretary of the Navy, in which the subject is fully presented. I unite in his recommendation that the Congress enact such special legislation as may be necessary to enable the department to make contracts early in the coming year for armor of the best quality that can be obtained in this country for the Maine, Ohio, and Missouri, and that the provision of the act of March 3, 1899, limiting the price of armor to \$300 per ton be removed.

In the matter of naval construction Italy and Japan, of the great powers, laid down less tonnage the year 1899 than this country, and Italy alone less tonnage under construction. I heartily concur in the recommendations for the increase of the navy, as suggested by the Secretary.

Our future progress and prosperity depend upon our ability to equal, if not surpass, other nations in the enlargement and advance of science, industry, and commerce. To invention we must turn to one of the most powerful aids to the accomplishment of such a result. The attention of the Congress is directed to the report of the Commissioner of Patents, in which will be found valuable suggestions and recommendations.

On the 30th of June, 1899, the pension roll of the United States numbered 991,519. These include the pensioners of the army and navy in all our wars. The number added to the rolls during the year was 40,991. The number dropped by reason of death, remarriage, minors by legal limitation, failure to claim within three years, and other causes, was 43,186, and the number of claims allowed was 107,919. During the year 89,054 pension certificates were issued, of which 37,077 were for new or original pensions. The amount

disbursed for army and navy pensions during the year was \$138,355,052.95, which was \$1,051,461.61 less than the sum of the appropriations.

The Grand Army of the Republic at its recent national encampment held in Philadelphia has brought to my attention and to that of the Congress the wisdom and justice of a modification of the third section of the act of June 27, 1890, which provides pensions for the widows of officers and enlisted men who served ninety days or more during the War of the Rebellion and were honorably discharged, provided that such widows are without other means of support than their daily labor and were married to the soldier, sailor, or marine on account of whose service they claim pension prior to the date of the act.

The present holding of the department is that if the widow's income aside from her daily labor does not exceed in amount what her pension would be, to wit, \$96 per annum, she would be deemed to be without other means of support than her daily labor, and would be entitled to a pension under this act; while if the widow's income independent of the amount received by her as the result of her daily labor exceeds \$96, she would not be pensionable under the act. I am advised by the Commissioner of Pensions that the amount of the income allowed before title to pension would be barred has varied widely under different administrations of the Pension Office, as well as during different periods of the same administration, and has been the cause of just complaint and criticism.

With the approval of the Secretary of the Interior the Commissioner of Pensions recommends that, in order to make the practice at all times uniform and to do justice to the dependent widow, the amount of income allowed independent of the proceeds of her daily labor should be not less than \$250 per annum, and he urges that the Congress shall so amend the act as to permit the Pension Office to grant pensionable status to widows under the terms of the third section of the act of June 27, 1890, whose income aside from the proceeds of daily labor is not in excess of \$250 per annum. I believe this to be a simple act of justice and heartily recommend it.

The Dawes Commission reports that gratifying progress has been made in its work during the preceding year. The field work of enrollment of four of the nations has been completed. I recommend that Congress at an early day make liberal appropriation for educational purposes in the Indian Territory.

In accordance with the act of Congress approved March 3, 1899, the preliminary work in connection with the twelfth census is now fully under way. The officers required for the proper administration of the duties imposed have been selected. The provision for securing a proper enumeration of the population, as well as to secure evidence of the industrial growth of the nation, is broader and more comprehensive than any similar legislation in the past. The director advises that every needful effort is being made to push this great work to completion in the time limited by the statute. It is believed that the twelfth census will emphasize our remarkable advance in all that pertains to national progress.

Under the authority of the act of Congress approved July 7, 1898, the commission consisting of the Secretary of the Treasury, the Attorney-General, and the Secretary of the Interior has made an agreement of settlement, which has had my approval, of the indebtedness to the Government growing out of the issue of bonds to aid in the construction of the Central Pacific and Western Pacific Railroads. The agreement secures to the

Government the principal and interest of said bonds, amounting to \$58,812,715.48. There has been paid thereon \$11,762,543.12, which has been covered into the Treasury, and the remainder, payable within ten years, with interest at the rate of 3 per cent. per annum, payable semiannually, is secured by the deposit of an equal amount of first-mortgage bonds of the Pacific Railway companies. The amounts paid and secured to be paid to the Government on account of the Pacific Railroad subsidy claims are:

Union Pacific, cash.....	\$58,448,223.75
Kansas Pacific, cash.....	6,303,000.00
Central and Western Pacific, cash.....	11,798,314.14
Notes, secured.....	47,050,172.36
Kansas Pacific—dividends for deficiency due United States, cash.....	\$21,897.70

Making a total of..... \$124,421,607.95

The whole indebtedness was about \$130,000,000, more than half of which consisted of accrued interest, for which sum the Government has realized the entire amount less about \$6,000,000 within a period of two years.

On June 30, 1898, there were 30 forest reservations (exclusive of the Afognak Forest and Fish Culture Reserve in Alaska), embracing an estimated area of 40,719,474 acres. During the past year two of the existing forest reserves, the Trabuco Cañon (California) and Black Hills (South Dakota and Wyoming) have been considerably enlarged, the area of the Mount Rainier Reserve, in the State of Washington, has been somewhat reduced, and six additional reserves have been established, namely, the San Francisco Mountains (Arizona), the Black Mesa (Arizona), Lake Tahoe (California), Gallatin (Montana), Gila River (New Mexico), and Fish Lake (Utah), the total estimated area of which is 5,205,775 acres. This makes at the present time a total of 36 forest reservations, embracing an estimated area of 46,021,899 acres. This estimated area is the aggregated areas within the boundaries of the reserves. The lands actually reserved are, however, only the vacant public lands therein, and these have been set aside and reserved for sale or settlement in order that they may be of the greatest use to the people.

Protection of the national forests, inaugurated by the Department of the Interior in 1897, has been continued during the past year, and much has been accomplished in the way of preventing forest fires and the protection of the timber. There are now large tracts covered by forests which will eventually be reserved and set apart for forest uses. Until that can be done Congress should increase the appropriations for the work of protecting the forests.

The Department of Agriculture is constantly consulting the needs of producers in all the States and Territories. It is introducing seeds and plants of great value and promoting fuller diversification of crops. Grains, grasses, fruits, legumes, and vegetables are imported for all parts of the United States. Under this encouragement the sugar-beet factory multiplies in the North and far West, semitropical plants are sent to the South, and congenial climates are sought for the choice productions of the far East. The hybridizing of fruit trees and grains is conducted in the search for varieties adapted to exacting conditions. The introduction of tea gardens into the Southern States promises to provide employment for idle hands, as well as to supply the home market with tea. The subject of irrigation where it is of vital importance to the people is being carefully studied, steps are being taken to reclaim injured or abandoned lands,

and information for the people along these lines is being printed and distributed.

Markets are being sought and opened up for our plus farm and factory products in Europe and Asia. The outlook for the education of the young farmer through agricultural college and experiment station, with opportunity given to special agents in the Department of Agriculture, is very promising. The people of Hawaii, Porto Rico, and the Philippine Islands should be helped, by the establishment of experiment stations, to a more scientific knowledge of the production of coffee, rubber, and other tropical products, for which there is demand in the United States.

There is widespread interest in the improvement of our public highways at the present time, and the Department of Agriculture is co-operating with the people in each locality in making the most possible roads from local material and in experimenting with steel tracks. A more intelligent system of managing the forests of the country is being put in operation and a careful study of the whole forestry problem is being conducted throughout the United States. A very extensive and complete exhibit of the agricultural and horticultural products of the United States is being prepared for the Paris Exposition.

On the 10th of December, 1898, the treaty of peace between the United States and Spain was signed. It provided, among other things, that Spain should cede to the United States the archipelago known as the Philippine Islands, that the United States should pay to Spain the sum of \$20,000,000, and that the civil rights and political status of the native inhabitants of the territories thus ceded to the United States should be determined by the Congress. The treaty was ratified by the Senate on the 6th of February, 1899, by the Government of Spain on the 19th of March following. The ratifications were exchanged on the 11th of April and the treaty publicly proclaimed. On the 2d of March the Congress voted the sum contemplated by the treaty, and the amount was paid over to the Spanish Government on the 1st of May.

In this manner the Philippines came to the United States. The islands were ceded by the Government of Spain, which had been in undisputed possession of them for centuries. They were accepted not merely by our authorized commissioners in Paris, under the direction of the Executive, but by the constitutional and well-considered action of the representatives of the people of the United States in both houses of Congress. I have every reason to believe, and I still believe, that the transfer of sovereignty was in accordance with the wishes and the aspirations of the great masses of the Filipino people.

From the earliest moment no opportunity was lost of assuring the people of the islands of our ardent desire for their welfare and of the intention of this Government to do everything possible to advance their interests. In my order of the 1st of May, 1898, the commander of the military expedition dispatched to the Philippines was instructed to declare that we came not to make war on the people of that country, "nor upon any party or faction among them, but to protect them in their homes, in their employments, and in their personal and religious rights." That there should be no doubt as to the paramount authority of the United States on the 17th of August it was directed that "there must be no joint occupation with the insurgents; that the United States must preserve the peace and protect persons and property within the territory occupied by their military and naval forces; that the insurgents and all others must recognize the authority of the United States."

the military occupation and authority of the United States. As early as Dec. 4, before the session, and in anticipation of that event, the commander in Manila was urged to restore peace and tranquillity and to undertake the establishment of a beneficent government, which should afford the fullest security for life and property.

On the 21st of December, after the treaty was signed, the commander of the forces of occupation was instructed "to announce and proclaim in the most public manner that we come, not as invaders and conquerors, but as friends to protect the natives in their homes, in their employments, and in their personal and religious rights." On the same day, while ordering Gen. Otis to see that the peace should be preserved in Iloilo, he was admonished that "it is most important that there should be no conflict with the insurgents." On the 1st day of January, 1899, urgent orders were reiterated that the kindly intentions of this Government should be in every possible way communicated to the insurgents.

On the 21st of January I announced my intention of dispatching to Manila a commission composed of three gentlemen of the highest character and distinction, thoroughly acquainted with the Orient, who, in association with Admiral Dewey and Major-Gen. Otis, were instructed "to facilitate the most humane and effective extension of authority throughout the islands, and to secure with the least possible delay the benefits of a wise and generous protection of life and property to the inhabitants." These gentlemen were Dr. Jacob Gould Thurman, president of Cornell University; the Hon. Charles Denby, for many years minister to China; and Prof. Dean C. Worcester, of the University of Michigan, who had made a most careful study of life in the Philippines. While the treaty of peace was under consideration in the Senate these commissioners set out on their mission of good will and liberation. Their character was a sufficient guarantee of the beneficent purpose with which they went, even if they had not borne the positive instructions of this Government, which made their errand pre-eminently one of peace and friendship.

But before their arrival at Manila the sinister ambition of a few leaders of the Filipinos had created a situation full of embarrassment for us and most grievous in its consequences to themselves. The clear and impartial preliminary report of the commissioners, which I transmit herewith, gives so lucid and comprehensive a history of the present insurrectionary movement that the story need not be here repeated. It is enough to say that the claim of the rebel leader that he was promised independence by any officer of the United States in return for his assistance has no foundation in fact and is categorically denied by the very witnesses who were called to prove it. The most able insurgent leader hoped for when he came back to Manila was the liberation of the islands from the Spanish control, which they had been laboring for years without success to throw off.

The prompt accomplishment of this work by the American army and navy gave him other ideas and ambitions, and insidious suggestions from various quarters perverted the purposes and intentions with which he had taken up arms. No sooner had our army captured Manila than the Filipino forces began to assume an attitude of suspicion and hostility which the utmost efforts of our officers and troops were unable to disarm or modify. Their kindness and forbearance were taken as a proof of cowardice. The aggressions of the Filipinos continually increased until finally, just before the time set by the Senate of the United

States for a vote upon the treaty, an attack, evidently prepared in advance, was made all along the American lines, which resulted in a terribly destructive and sanguinary repulse of the insurgents.

Ten days later an order of the insurgent government was issued to its adherents who had remained in Manila, of which Gen. Otis justly observes that "for barbarous intent it is unequalled in modern times." It directs that at 8 o'clock on the night of the 15th of February the "territorial militia" shall come together in the streets of San Pedro armed with their *bolos*, with guns and ammunition where convenient; that Filipino families only shall be respected; but that all other individuals, of whatever race they may be, shall be exterminated without any compassion, after the extermination of the army of occupation, and adds: "Brothers, we must avenge ourselves on the Americans and exterminate them, that we may take our revenge for the infamies and treacheries which they have committed upon us. Have no compassion upon them; attack with vigor." A copy of this fell by good fortune into the hands of our officers, and they were able to take measures to control the rising, which was actually attempted on the night of Feb. 22, a week later than was originally contemplated. Considerable numbers of armed insurgents entered the city by water ways and swamps, and in concert with confederates inside attempted to destroy Manila by fire. They were kept in check during the night, and the next day driven out of the city with heavy loss.

This was the unhappy condition of affairs which confronted our commissioners on their arrival in Manila. They had come with the hope and intention of co-operating with Admiral Dewey and Major-Gen. Otis in establishing peace and order in the archipelago and the largest measure of self-government compatible with the true welfare of the people. What they actually found can best be set forth in their own words:

"Deplorable as war is, the one in which we are now engaged was unavoidable by us. We were attacked by a bold, adventurous, and enthusiastic army. No alternative was left to us except ignominious retreat.

"It is not to be conceived of that any American would have sanctioned the surrender of Manila to the insurgents. Our obligations to other nations and to the friendly Filipinos and to ourselves and our flag demanded that force should be met by force. Whatever the future of the Philippines may be, there is no course open to us now except the prosecution of the war until the insurgents are reduced to submission. The commission is of the opinion that there has been no time since the destruction of the Spanish squadron by Admiral Dewey when it was possible to withdraw our forces from the islands either with honor to ourselves or with safety to the inhabitants."

The course thus clearly indicated has been unflinchingly pursued. The rebellion must be put down. Civil government can not be thoroughly established until order is restored. With a devotion and gallantry worthy of its most brilliant history, the army, ably and loyally assisted by the navy, has carried on this unwelcome but most righteous campaign with richly deserved success. The noble self-sacrifice with which our soldiers and sailors whose terms of service had expired refused to avail themselves of their right to return home as long as they were needed at the front forms one of the brightest pages in our annals. Although their operations have been somewhat interrupted and checked by a rainy season of unusual violence and duration, they have gained ground steadily

in every direction, and now look forward confidently to a speedy completion of their task.

The unfavorable circumstances connected with an active campaign have not been permitted to interfere with the equally important work of reconstruction. Again I invite your attention to the report of the commissioners for the interesting and encouraging details of the work already accomplished in the establishment of peace and order and the inauguration of self-governing municipal life in many portions of the archipelago. A notable beginning has been made in the establishment of a government in the island of Negros which is deserving of special consideration. This was the first island to accept American sovereignty. Its people unreservedly proclaimed allegiance to the United States and adopted a constitution looking to the establishment of a popular government. It was impossible to guarantee to the people of Negros that the constitution so adopted should be the ultimate form of government. Such a question, under the treaty with Spain and in accordance with our own Constitution and laws, came exclusively within the jurisdiction of the Congress. The government actually set up by the inhabitants of Negros eventually proved unsatisfactory to the natives themselves. A new system was put into force by order of the major general commanding the department, of which the following are the most important elements:

It was ordered that the government of the island of Negros should consist of a military governor appointed by the United States military governor of the Philippines, and a civil governor and an advisory council elected by the people. The military governor was authorized to appoint secretaries of the treasury, interior, agriculture, public instruction, an attorney-general, and an auditor. The seat of government was fixed at Bacolod. The military governor exercises the supreme executive power. He is to see that the laws are executed, appoint to office and fill all vacancies in office not otherwise provided for, and may, with the approval of the military governor of the Philippines, remove any officer from office. The civil governor advises the military governor on all public civil questions and presides over the advisory council. He, in general, performs the duties which are performed by secretaries of state in our own system of government.

The advisory council consists of eight members elected by the people within territorial limits which are defined in the order of the commanding general.

The times and places of holding elections are to be fixed by the military governor of the island of Negros. The qualifications of voters are as follows:

(1) A voter must be a male citizen of the island of Negros. (2) Of the age of twenty-one years. (3) He shall be able to speak, read, and write the English, Spanish, or Visayan language, or he must own real property worth \$500, or pay a rental on real property of the value of \$1,000. (4) He must have resided in the island not less than one year preceding, and in the district in which he offers to register as a voter not less than three months immediately preceding the time he offers to register. (5) He must register at a time fixed by law before voting. (6) Prior to such registration he shall have paid all taxes due by him to the Government. Provided, that no insane person shall be allowed to register or vote.

The military governor has the right to veto all bills or resolutions adopted by the advisory council, and his veto is final if not disapproved by the military governor of the Philippines.

The advisory council discharges all the ordinary duties of a legislature. The usual duties pertaining to said offices are to be performed by the secretaries of the treasury, interior, agriculture, public instruction, the attorney-general, and the auditor.

The judicial power is vested in three judges, who are to be appointed by the military governor of the island. Inferior courts are to be established.

Free public schools are to be established throughout the populous districts of the islands, in which the English language shall be taught, and this subject will receive the careful consideration of the advisory council.

The burden of government must be distributed equally and equitably among the people. The military authorities will collect and receive the customs revenue, and will control postal matters and Philippine interisland trade and commerce.

The military governor, subject to the approval of the military governor of the Philippines, determines all questions not specifically provided for, and which do not come under the jurisdiction of the advisory council.

The authorities of the Sulu Islands have accepted the succession of the United States to the rights of Spain, and our flag floats over that territory. On the 10th of August, 1899, Brig-Gen. J. C. Bates, United States Volunteers, negotiated an agreement with the Sultan and his principal chiefs, which I transmit herewith. By Article I the sovereignty of the United States over the whole archipelago of Jolo and its dependencies is declared and acknowledged.

The United States flag will be used in the archipelago and its dependencies, on land and sea. Piracy is to be suppressed, and the Sultan agrees to co-operate heartily with the United States authorities to that end and to make every possible effort to arrest and bring to justice all persons engaged in piracy. All trade in domestic products of the archipelago of Jolo when carried on within any part of the Philippine Islands and under the American flag shall be free, unlimited, and undisturbed. The United States will give full protection to the Sultan in case any foreign nation should attempt to impose upon him. The United States will not sell the island of Jolo or any other island of the Jolo archipelago to any foreign nation without the consent of the Sultan. Salaries for the Sultan and his associates in the administration of the islands have been agreed upon to the amount of \$760 monthly.

Article X provides that any slave in the archipelago of Jolo shall have the right to purchase freedom by paying to the master the usual market value. The agreement by Gen. Bates was made subject to confirmation by the President and future modifications by the consent of the parties in interest. I have confirmed said agreement, subject to the action of the Congress, and with the reservation, which I have directed shall be communicated to the Sultan of Jolo, that this agreement is not to be deemed in any way to authorize or give the consent of the United States to the existence of slavery in the Sulu archipelago. I will communicate these facts to the Congress for its information and action.

Everything indicates that with the speedy suppression of the Tagalo rebellion life in the archipelago will soon resume its ordinary course under the protection of our sovereignty, and the people of those favored islands will enjoy a prosperity and a freedom which they have never before known. Already hundreds of schools are open and filled with children. Religious freedom is sacredly assured and enjoyed. The courts are dispensing justice. Business is beginning to circulate in

customed channels. Manila, whose inhabitants are fleeing to the country a few months ago, is now a populous and thriving mart of commerce. The earnest and unremitting endeavors of the commission and the admiral and major general commanding the Department of the Pacific to assure the people of the beneficent intentions of this Government have had their legitimate effect in convincing the great mass of them that peace and safety and prosperity and stable government can only be found in a loyal acceptance of the authority of the United States.

The future government of the Philippines rests with the Congress of the United States. Few of our responsibilities have ever been confided to

If we accept them in a spirit worthy of our age and our traditions, a great opportunity comes to us. The islands lie under the shelter of our flag. They are ours by every title of law and equity. They can not be abandoned. If we desert them we leave them at once to anarchy and anarchy leads to barbarism. We fling them, a golden rule of discord, among the rival powers, no one of which could permit another to seize them unquestioned. Their rich plains and valleys would be the scene of endless strife and bloodshed. The advent of Dewey's fleet in Manila Bay instead of peace, as we hope, the dawn of a new day of freedom and progress, will have been the beginning of an era of misery and violence worse than any which has darkened their unhappy past. The suggestion has been made that we could renounce our authority over the islands and, giving them independence, could retain a protectorate over them. This proposition will not be found, I am sure, worthy of your serious attention. Such an arrangement would involve at the outset a cruel breach of faith. It would place the peaceable and law-abiding majority, who ask nothing better than to be left in peace, at the mercy of the minority of armed insurgents. It would make us responsible for the acts of the insurgent leaders and give us no power to control them. It would charge upon us the task of protecting them against each other and defending them against any foreign power with which they chose to quarrel. In short, it would take from the Congress of the United States the power of declaring war and vest that tremendous prerogative in the Tagal leader of the insurrection.

It does not seem desirable that I should recommend at this time a specific and final form of government for these islands. When peace shall be restored it will be the duty of Congress to conduct a plan of government which shall establish and maintain freedom and order and peace in the Philippines. The insurrection is still existing, and when it terminates further information will be required as to the actual condition of affairs before inaugurating a permanent scheme of civil government. The full report of the commission, now in preparation, will contain information and suggestions which will be of value to Congress, and which I will transmit as soon as it is completed. As long as the insurrection continues the military arm must necessarily be supreme. But there is no reason why steps should not be taken from time to time to inaugurate governments especially popular in their form as fast as territory is held and controlled by our troops. To this end, in considering the advisability of the return of the commission, or such of the members thereof as can be secured, to aid the existing authorities and facilitate this work throughout the islands, I have believed that reconstruction should not begin by the establishment of one central civil government for all the islands, with its seat at

Manila, but rather that the work should be commenced by building up from the bottom, first establishing municipal governments and then provincial governments, a central government at last to follow.

Until Congress shall have made known the formal expression of its will I shall use the authority vested in me by the Constitution and the statutes to uphold the sovereignty of the United States in those distant islands as in all other places where our flag rightfully floats. I shall put at the disposal of the army and navy all the means which the liberality of Congress and the people have provided to cause this unprovoked and wasteful insurrection to cease. If any orders of mine were required to insure the merciful conduct of military and naval operations, they would not be lacking; but every step of the progress of our troops has been marked by a humanity which has surprised even the misguided insurgents. The truest kindness to them will be a swift and effective defeat of their present leader. The hour of victory will be the hour of clemency and reconstruction.

No effort will be spared to build up the waste places desolated by war and by long years of misgovernment. We shall not wait for the end of strife to begin the beneficent work. We shall continue, as we have begun, to open the schools and the churches, to set the courts in operation, to foster industry and trade and agriculture, and in every way in our power to make these people whom Providence has brought within our jurisdiction feel that it is their liberty and not our power, their welfare and not our gain, we are seeking to enhance. Our flag has never waved over any community but in blessing. I believe the Filipinos will soon recognize the fact that it has not lost its gift of benediction in its worldwide journey to their shores.

Some embarrassment in administration has occurred by reason of the peculiar status which the Hawaiian Islands at present occupy under the joint resolution of annexation approved July 7, 1898. While by that resolution the republic of Hawaii as an independent nation was extinguished, its separate sovereignty destroyed, and its property and possessions vested in the United States, yet a complete establishment for its government under our system was not effected. While the municipal laws of the islands not enacted for the fulfillment of treaties and not inconsistent with the joint resolution or contrary to the Constitution of the United States or any of its treaties remain in force, yet these laws relate only to the social and internal affairs of the islands, and do not touch many subjects of importance which are of a broader national character. For example, the Hawaiian Republic was divested of all title to the public lands in the islands, and is not only unable to dispose of lands to settlers desiring to take up homestead sites, but is without power to give complete title in cases where lands have been entered upon under lease or other conditions which carry with them the right to the purchaser, lessee, or settler to have a full title granted to him upon compliance with the conditions prescribed by law or by his particular agreement of entry.

Questions of doubt and difficulty have also arisen with reference to the collection of tonnage tax on vessels coming from Hawaiian ports; with reference to the status of Chinese in the islands, their entrance and exit therefrom; as to patents and copyrights; as to the register of vessels under the navigation laws; as to the necessity of holding elections in accordance with the provisions of the Hawaiian statutes for the choice of various

officers; and as to several other matters of detail touching the interests both of the island and of the Federal Government.

By the resolution of annexation the President was directed to appoint five commissioners to recommend to Congress such legislation concerning the islands as they should deem necessary or proper. These commissioners were duly appointed, and after a careful investigation and study of the system of laws and government prevailing in the islands, and of the conditions existing there, they prepared a bill to provide a government under the title of "The Territory of Hawaii." The report of the commission, with the bill which they prepared, was transmitted by me to Congress on Dec. 8, 1898, but the bill still awaits final action.

The people of these islands are entitled to the benefits and privileges of our Constitution, but in the absence of any act of Congress providing for Federal courts in the islands, and for a procedure by which appeals, writs of error, and other judicial proceedings necessary for the enforcement of civil rights may be prosecuted, they are powerless to secure their enforcement by the judgment of the courts of the United States. It is manifestly important, therefore, that an act shall be passed as speedily as possible erecting these islands into a judicial district, providing for the appointment of a judge and other proper officers and methods of procedure in appellate proceedings, and that the government of this newly acquired territory under the Federal Constitution shall be fully defined and provided for.

A necessity for immediate legislative relief exists in the Territory of Alaska. Substantially the only law providing a civil government for this Territory is the act of May 17, 1884. This is meager in its provisions, and is fitted only for the administration of affairs in a country sparsely inhabited by civilized people and unimportant in trade and production, as was Alaska at the time this act was passed. The increase in population by immigration during the past few years, consequent upon the discovery of gold, has produced such a condition as calls for more ample facilities for local self-government and more numerous conveniences of civil and judicial administration. Settlements have grown up in various places, constituting in point of population and business cities of thousands of inhabitants, yet there is no provision of law under which a municipality can be organized or maintained.

In some localities the inhabitants have met together and voluntarily formed a municipal organization for the purpose of local government, adopting the form of a municipal constitution and charter, under which said officials have been appointed; and ordinances creating and regulating a police force, a fire department, a department of health, and making provision for the care of the insane and indigent poor and sick and for public schools, have been passed. These proceedings and the ordinances passed by such municipalities are without statutory authority and have no sanction except as they are maintained by the popular sentiment of the community. There is an entire absence of authority to provide the ordinary instruments of local police control and administration, the population consisting of the usual percentage of lawless adventurers of the class that always flock to new fields of enterprise or discovery, and under circumstances which require more than ordinary provision for the maintenance of peace, good order, and lawful conduct.

The whole vast area of Alaska comprises but one judicial district, with one judge, one marshal, and one district attorney, yet the civil and crim-

inal business has more than doubled within the past year, and is many times greater both in volume and importance than it was in 1884. The duties of the judge require him to travel thousands of miles to discharge his judicial duties at the various places designated for that purpose. The Territory should be divided into at least two districts, and an additional judge, district attorney, marshal, and other appropriate officers be provided.

There is practically no organized form of government in the Territory. There is no authority, except in Congress, to pass any law, no matter how local or trivial, and the difficulty of conveying to the Congress an adequate conception and understanding of the various needs of the people in the different communities is easily understood. I see no reason why a more complete form of Territorial organization should not be provided. Following the precedent established in the year 1805, when a temporary government was provided for the recently acquired territory, then known under the name of Louisiana, it seems to me that it would be advantageous to confer greater executive power upon the governor and to establish, as was done in the case of the Territory of Louisiana, a legislative council having power to adopt ordinances which shall extend to all the rightful subjects of local legislation, such ordinances not to take effect until reported to and approved by the Congress in session, and if that body is not in session then by the President. In this manner a system of laws providing for the incorporation and government of towns and cities having a certain population, giving them the power to establish and maintain a system of education to be locally supported, and ordinances providing for police, sanitary, and other such purposes, could be speedily provided. I believe a provision of this kind would be satisfactory to the people of the Territory. It is probable that the area is too vast and the population too scattered and transitory to make it wise at the present time to provide for an elective legislative body, but the conditions calling for local self-government will undoubtedly very soon exist, and will be facilitated by the measures which I have recommended.

I recommend that legislation to the same end be had with reference to the government of Porto Rico. The time is ripe for the adoption of a temporary form of government for this island; and many suggestions made with reference to Alaska are applicable also to Porto Rico.

The system of civil jurisprudence now adopted by the people of this island is described by competent lawyers who are familiar with it as thoroughly modern and scientific, so far as it relates to matters of internal business, trade, production, and social and private right in general. The cities of the island are governed under charters which probably require very little or no change. So that with relation to matters of local concern and private right, it is not probable that much, if any, legislation is desirable; but with reference to public administration and the relations of the island to the Federal Government, there are many matters which are of pressing urgency. The same necessity exists for legislation on the part of Congress to establish Federal courts and Federal jurisdiction in the island as has been previously pointed out by me with reference to Hawaii. Besides the administration of justice, there are the subjects of the public lands; the control and improvement of rivers and harbors; the control of the waters or streams not navigable, which, under the Spanish law, belonged to the Crown of Spain, and have by the treaty of cession passed to the United

ates; the immigration of people from foreign countries; the importation of contract labor; the position and collection of internal revenue; the regulation of the navigation laws; the regulation of the current money; the establishment of post offices and post roads; the regulation of tariff rates on merchandise imported from the island into the United States; the establishment of ports of entry and delivery; the regulation of patents and copyrights; these, with various other subjects which rest entirely within the power of the Congress, call for careful consideration and immediate action. It must be borne in mind that since the cession of Porto Rico has been denied the principal markets she had long enjoyed and our tariffs have been continued against her products as when she was under Spanish sovereignty. The markets of Spain are closed to her products except upon terms to which the commerce of all nations is subjected. The island of Cuba, which used to buy her cattle and tobacco without customs duties, now imposes the same duties upon these products as from any other country entering her ports. She has therefore lost her free intercourse with Spain and Cuba without any compensating benefits in this market. Her coffee was little known and not in use by our people, and therefore there was no demand here for this, one of her chief products. The markets of the United States should be opened up to her products. Our plain duty is to abolish all customs duties between the United States and Porto Rico and give her products free access to our markets. As a result of the hurricane which swept over Porto Rico on the 8th of August, 1899, over 100,000 people were reduced to absolute destitution, without homes, and deprived of the necessities of life. At the appeal of the War Department the people of the United States made prompt and generous response. In addition to the private charity of our people, the War Department has expended for the relief of the distressed \$392,342.63, which does not include the cost of transportation.

It is desirable that the government of the island under the law of belligerent right, now maintained through the Executive Department, should be superseded by an administration entirely civil in its nature. For present purposes I recommend that Congress pass a law for the organization of a temporary government, which shall provide for the appointment by the President, subject to confirmation by the Senate, of a governor and such other officers as the general administration of the island may require, and that for legislative purposes upon subjects of a local nature not partaking of a Federal character a legislative council, composed partly of Porto Ricans and partly of citizens of the United States, shall be nominated and appointed by the President, subject to confirmation by the Senate, their acts to be subject to the approval of the Congress or the President prior to going into effect. In the municipalities and other local divisions I recommend that the principle of local self-government be applied at once, so as to enable the intelligent citizens of the island to participate in their own government and to learn by practical experience the duties and requirements of a self-contained and self-governing people. I have not thought it wise to commit the entire government of the island to officers selected by the people, because I doubt whether in habits, training, and experience they are such as to fit them to exercise at once so large a degree of self-government; but it is my judgment and expectation that they will soon arrive at an attainment of experience and wisdom and self-control that will justify conferring upon them a much larger participation in the choice of their insular officers.

The fundamental requirements for these people, as for all people, is education. The free school-house is the best preceptor for citizenship. In the introduction of modern educational methods care, however, must be exercised that changes be not made too abruptly and that the history and racial peculiarities of the inhabitants shall be given due weight. Systems of education in these new possessions founded upon common-sense methods, adapted to existing conditions and looking to the future moral and industrial advancement of the people, will commend to them in a peculiarly effective manner the blessings of free government.

The love of law and the sense of obedience and submission to the lawfully constituted judicial tribunals are imbedded in the hearts of our people, and any violation of these sentiments and disregard of their obligations justly arouses public condemnation. The guarantees of life, liberty, and of civil rights should be faithfully upheld; the right of trial by jury respected and defended. The rule of the courts should assure the public of the prompt trial of those charged with criminal offenses, and upon conviction the punishment should be commensurate with the enormity of the crime.

Those who, in disregard of law and the public peace, unwilling to await the judgment of court and jury, constitute themselves judges and executioners, should not escape the severest penalties for their crimes.

What I said in my inaugural address of March 4, 1897, I now repeat:

"The constituted authorities must be cheerfully and vigorously upheld. Lynchings must not be tolerated in a great and civilized country like the United States. Courts, not mobs, must execute the penalties of the laws. The preservation of public order, the right of discussion, the integrity of courts, and the orderly administration of justice must continue forever the rock of safety upon which our Government securely rests."

In accordance with the act of Congress providing for an appropriate national celebration in the year 1900 of the establishment of the seat of Government in the District of Columbia, I have appointed a committee, consisting of the governors of all the States and Territories of the United States, who have been invited to assemble in the city of Washington on the 2d of December, 1899, which, with the committees of the Congress and the District of Columbia, are charged with the proper conduct of this celebration.

Congress at its last session appropriated \$5,000 "to enable the chief of engineers of the army to continue the examination of the subject and to make or secure designs, calculations, and estimates for a memorial bridge from the most convenient point of the Naval Observatory grounds, or adjacent thereto, across the Potomac river to the most convenient point of the Arlington estate property." In accordance with the provisions of this act the chief of engineers has selected four eminent bridge engineers to submit competitive designs for a bridge combining the elements of strength and durability and such architectural embellishment and ornamentation as will fitly apply to the dedication, "A memorial to American patriotism." The designs are now being prepared, and as soon as completed will be submitted to the Congress by the Secretary of War. The proposed bridge would be a convenience to all the people from every part of the country who visit the national cemetery, an ornament to the capital of the nation, and forever stand as a monument to American patriotism. I do not doubt that Congress will give to the enterprise still further proof of its favor and approval.

The Executive order of May 6, 1896, extending the limits of the classified service, brought within the operation of the civil service law and rules nearly all the executive civil service not previously classified.

Some of the inclusions were found wholly illogical and unsuited to the work of the several departments. The application of the rules to many of the places so included was found to result in friction and embarrassment. After long and very careful consideration it became evident to the heads of the departments responsible for their efficiency, that in order to remove these difficulties and promote an efficient and harmonious administration certain amendments were necessary. These amendments were promulgated by me in Executive order dated May 29, 1899.

The principal purpose of the order was to except from competitive examination certain places involving fiduciary responsibilities or duties of a strictly confidential, scientific, or executive character which it was thought might better be filled either by noncompetitive examination, or in the discretion of the appointing officer, than by open competition. These places were comparatively few in number. The order provides for the filling of a much larger number of places, mainly in the outside service of the War Department, by what is known as the registration system, under regulations to be approved by the President, similar to those which have produced such admirable results in the navy yard service.

All of the amendments had for their main object a more efficient and satisfactory administration of the system of appointment established by the civil service law. The results attained show that under their operation the public service has improved and that the civil service system is relieved of many objectionable features which heretofore subjected it to just criticism and the administrative officers to the charge of unbusinesslike methods in the conduct of public affairs. It is believed that the merit system has been greatly strengthened and its permanence assured. It will be my constant aim in the administration of government in our new possessions to make fitness, character, and merit essential to appointment to office, and to give to the capable and deserving inhabitants preference in appointments.

The 14th of December will be the one hundredth anniversary of the death of Washington. For a hundred years the republic has had the priceless advantage of the lofty standard of character and conduct which he bequeathed to the American people. It is an inheritance which time, instead of wasting, continually increases and enriches. We may justly hope that in the years to come the benignant influence of the Father of his Country may be even more potent for good than in the century which is drawing to a close. I have been glad to learn that in many parts of the country the people will fittingly observe this historic anniversary.

Presented to this Congress are great opportunities. With them come great responsibilities. The power confided to us increases the weight of our obligations to the people, and we must be profoundly sensible of them as we contemplate the new and grave problems which confront us. Aiming only at the public good, we can not err. A right interpretation of the people's will and of duty can not fail to insure wise measures for the welfare of the islands which have come under the authority of the United States, and inure to the common interest and lasting honor of our country. Never has this nation had more abundant cause than during the past year for thankfulness to God

for manifold blessings and mercies, for which make reverent acknowledgment.

WILLIAM MCKINLEY

EXECUTIVE MANSION, Dec. 5, 1899.

The Financial Measure.—The most important legislation of the session was the passage of bill "to define and fix the standard of value to maintain the parity of all forms of money issued or coined by the United States, to refund the public debt, and for other purposes." It was introduced in the House of Representatives on December 1899, and on Dec. 7 the member of the majority having it in charge proposed its immediate consideration by unanimous consent. In behalf of minority objection was made that the measure had been prepared during vacation by a special Republican committee; that it had never acted upon by a regular committee of the House; that the Democratic members had no knowledge of it; and that they wanted time to study it and discuss it. Dec. 8, the Committee on Rules reported a resolution shaped to provide for its passage. The special rule ordered consideration of the committee of the whole to begin on Monday, December 11, general discussion to continue until Friday afternoon, then discussion under the five-minute rule until Saturday afternoon, when the bill was reported to the House with amendments. The bill on the final passage of the measure was passed Monday, Dec. 18, after the reading of the journal. The space of forty minutes allowed for the discussion of the proposed rule before a vote on it was spent—apart from the usual bickerings about consistency—by the minority in a protest against hurried action in a matter of such importance, by the majority in citing Democratic authority for this method of dealing with an emergency. The rule was adopted by a vote of 164 yeas and 144 nays, 46 members not voting.

The debate that followed covered points which have been discussed directly or indirectly in Congress year after year, and no summary of the long discussion in both branches of Congress would be feasible, or perhaps desirable, though many speeches were made in the House and in the Senate, and a wealth of financial information is spread over the pages of the Record. It may be well while to give, merely as suggesting various points of view, three illustrative extracts.

Mr. Overstreet, of Indiana, who was in charge of the measure in the House, in arguing for the necessity of a declaration in favor of the gold standard, reviewed briefly the national monetary situation, and maintained that we had already entered upon that policy and that it was essential to formulate it in the law. He said:

"The first effort in this country toward establishing a monetary standard was in 1786, when the Congress of the Confederation chose as the unit of value the 'Spanish milled dollar,' containing 375.64 grains of pure silver. Thereafter no mint in the United States, and no 'milled dollar' was never coined in America."

"The first coinage law under the republic was enacted April 2, 1792, and sought to establish a double standard of gold and silver at a ratio of 1 to 15. Whatever the result of the operation of the law, and the failure of the two metals to maintain the relative values fixed by statute, nevertheless it is quite clear that it was the intent and purpose of the lawmaking power to provide and maintain a double standard of value."

"The subsequent act of June 28, 1834, changed the ratio from 1 to 15 to 1 to 16, by reducing the weight of the eagle from 270 grains to 258 grains, and was in the hope of maintaining the double s

by regulating the ratio to conform to the commercial values of the metals.

Less than three years thereafter, by the act of Feb. 18, 1837, which changed the ratio from 16 to 1 to 15.988 by again modifying the quantity of metal in the coins, the effort to maintain a double standard was apparent. The remarkable discovery of gold in California in 1847 and in Australia in 1851 had a material influence upon the relative value of gold and silver, the bullion in the silver coins of the United States increased in value beyond the value noted on their face. This condition bore fruit in the act of Feb. 21, 1853, which provided for the reduction of the amount of metal in the silver half dollar, quarter, and dime, and prohibited the further coinage of subsidiary silver coins, except on Government account. The bullion value of the silver dollar prior to 1853, and, indeed, prior to 1837, was, the great proportion of the time, in excess of the face value, and comparatively few coins were coined.

The difference between the bullion and face value of silver coin accounted for their withdrawal from the channels of trade as a medium of exchange, and their conversion into commodities, regulated in value by the laws governing trade and commerce, irrespective of the statute making provision for their circulation as money at fixed valuations. The necessity for small coins created the demand for the half dollars, quarters, and dimes, which remained in circulation because the bullion was reduced and circulated at par because of the guarantee of the Government. By the provision of the law these subdivisions of the dollar were 'paid out at the mint for exchange for gold coins at par,' and there has never been a doubt but that their redemption would be equally at par. The struggle of the Government to maintain the double standard by continuing for nearly sixty years. The shift of the ratio between the two metals was met by the change of statute.

The universal experience in business transactions marked the withdrawal from circulation of undervalued coin. The debates in Congress prior to the passage of the act of Feb. 21, 1853, clearly mark the change of sentiment against the further effort to maintain a double standard. It was plainly claimed upon the floor of the House that in practice the gold standard was in force, and that it was the clear purpose of the Government to accept the single gold standard. While no statute was made to this end, the provisions of the laws of trade gave recognition to this basis of values. No effort was made to change this sentiment, and for twenty years the question of coinage commanded but little attention by the American people. The struggle of the Government through the civil war crippled the credit of the republic, and for a time specie payments were suspended and the Government debased to a paper basis.

The act of March 18, 1869, 'to strengthen the public credit,' pledged the Government to the payment of its demand notes and obligations in coin. It was the dawn of a new day in American finance and marked the resurrection of Government credit from the abyss into which it had fallen. The only coin in circulation at the time of the passage of the act of March 18, 1869, was gold. The subsequent provision for the redemption of the demand notes, and the universal policy of the Government to make redemption in the gold coin known at the time of redemption, demonstrates beyond doubt that this pledge of the Government has been faithfully kept. It was but

a short step, in principle as well as in time, to the provisions in the act of July 14, 1870, 'to authorize the refunding of the national debt,' which made the bonds of that issue 'redeemable in coin at the present standard of value.'

"The steps approaching the adoption of the gold standard became short and rapid. For five years prior to 1873 the question of legalizing the gold standard was under discussion in financial circles. As early as the winter of 1869 a bill was prepared in the Treasury Department containing provision for the discontinuance of the coinage of the silver dollar and the adoption of the gold dollar piece, at the standard weight of 25.8 grains, as the unit of value. This proposed measure was widely circulated among experts in finance, whose suggestions and criticisms were invited. On April 25, 1870, this bill, as S. 819, was introduced, and on Dec. 19 following was favorably reported.

"From the date of its preparation, in all of its forms, and throughout its discussions, covering several sessions, the provisions before mentioned remained intact. Not only that, but these two provisions were the only provisions relative to the standard of value and the silver dollar ever contained in the bill, either as it was originally drawn or throughout its entire consideration. The old standard silver dollar was never mentioned in the bill. The bill became a law Feb. 12, 1873. For more than a quarter of a century preceding that date the commercial world had treated gold as the standard of measurement of values. The 'act of 1873' was merely the policy and practice of our people crystallized into statute law. The change from the unwritten to the written law was simple and unattended by the slightest disturbance in trade.

"If there had been no further legislation concerning the coinage of silver, there would exist to-day no single doubt of the money standard of the United States. The law of Feb. 12, 1873, clearly adopts the gold one-dollar piece, at the standard weight of 25.8 grains of gold, as the unit of value. That statute has never been repealed nor directly amended, and by legal construction is in force to-day. Yet subsequent acts have so affected it that there is some doubt as to whether gold is fully recognized as our monetary standard. The act of Feb. 28, 1878, authorizing the coinage of the standard silver dollar, and the act of July 14, 1890, directing the purchase of silver bullion and the issue of Treasury notes thereon, brought into circulation such a tremendous quantity of silver guaranteed by the Government to circulate at par that the burden of the Government was so increased as to make doubtful the strength and stability of the standard.

"The fall in the price of silver gave courage to the advocates of cheap money, who sought, by restoring the silver dollar to circulation at less than its intrinsic value, to accomplish what they had failed to accomplish in their battle for cheap money at an earlier period. Public sentiment so suddenly changed upon this question that a free-coinage bill passed the House of Representatives on the 13th of December, 1876, by a vote of 167 to 53. Fortunately it was not acted upon by the Senate. A similar measure passed the House on Nov. 3, 1877, by a vote of 103 to 34. Early in the year 1878 this bill was considered by the Senate and a compromise effected, resulting in the passage of the so-called 'Bland-Allison act' on the 15th of February, 1878.

"With all the ills which this measure brought upon the country, it was far to be preferred to an absolute free-coinage bill which threatened the country at that date.

"President Hayes vetoed the bill, but on the 28th of February, 1878, it was passed over his veto by both houses, the vote in the House being 196 to 73, and in the Senate 46 to 19. The rapidity with which the silver dollars were coined and issued into circulation greatly stimulated the advocates of cheap money, who became restless at the delay occasioned by the mints, which were not able to turn out the money as rapidly as the people desired, and the law of July 14, 1890, providing for the immediate issue of Treasury notes based upon the bullion purchased, to be redeemed by the dollars as coined, enabled the issue of the money more rapidly than was provided by the capacity of the mints.

"By the act of Sept. 26, 1890, Congress discontinued the coinage of the one-dollar gold piece, which the law of Feb. 12, 1873, had declared to be the 'unit of value.' This act further confused the legal status of the standard. While the actual existence of the gold one-dollar piece is not essential, yet, it having been declared by law to be the 'unit of value,' its discontinuance cast doubt upon the character of the standard. The purchasing clause of the law of July 14, 1890, was repealed Nov. 1, 1893. So grievous had grown the burden upon the Government because of the vast issue of a depreciated coin that confidence in the Government's ability to maintain it was shaken. The same law which repealed the purchasing clause of the act of July 14, 1890, contained the provision declaring it to be the fixed purpose of the Government to maintain its gold and silver 'of equal intrinsic and exchangeable value.'

"But for this declaration the silver coins would have circulated only at their intrinsic value, which was less than par. With the declaration the pledge of the Government for the maintenance of their parity created an obligation as sacred as a national bond. By this pledge the Government made additional recognition of the standard of gold, in which by implication it proposed to measure the value of the silver dollar."

Mr. Bell, of Colorado, took the opposite view of the same topic. He said:

"The present legal standard of this nation is bimetallic, or based on both gold and silver, and \$18,000,000,000 of debts have been contracted under the bimetallic standard and \$1,300,000,000 of United States obligations are now outstanding made payable specifically in coin of the standard value of July 14, 1870, the time when the act was passed which embraced the present silver dollar as well as gold coin. The correctness of this version is proved not only by the decisions of the Attorney-General, but by the declaration of the Matthews resolution, which passed both houses of Congress with great unanimity in 1877.

"The second section of this bill provides—

"That all interest-bearing obligations of the United States for the payment of money now existing or hereafter to be entered into . . . shall be deemed and held to be payable in gold coin."

"What does the payment of these debts in gold which were contracted to be paid in gold and silver mean to the creditors of this nation?

"It means that after a struggle of over a quarter of a century the money changers and speculators have secured such a change of the money standard as to give them hundreds of millions of dollars in value more than they really lent.

"Sirs, this is not a matter of wild speculation; it is demonstrated through the actual offers of speculation for our bonds payable in coin or in gold alone. On Feb. 8, 1895, President Cleveland sold \$82,315,435 thirty-year coin bonds to August Belmont & Co., N. M. Rothschild & Sons, J. P.

Morgan & Co., and J. S. Morgan & Co., and obtained an offer at the same time that if he would have Congress provide that they should be payable specifically in gold coin that they would reduce the annual interest payment \$539,159, a saving in thirty years of \$16,174,770.

"President Cleveland upon this day in a special message to Congress said:

"The arrangement just completed . . . develops such a difference in the estimation of investors between bonds made payable in coin and those specifically made payable in gold in favor of the latter, as represented by three fourths of a cent in annual interest. In the agreement just concluded the annual saving in interest to the Government, if 3-per-cent. gold bonds should be substituted for 4-per-cent. coin bonds under the privilege reserved, would be \$539,159, amounting in thirty years, or at the maturity of the coin bonds, to \$16,174,770."

"And this sum was offered the Government to make them payable in gold alone. Now, the same men who made this advanced bid for bonds made specifically payable in gold hold largely our other coin bonds. If it was worth to them over \$500,000 a year to have \$62,000,000 made specifically payable in gold instead of in coin, then it was worth just as much in proportion to have the \$1,300,000,000 outstanding coin bonds made payable specifically in gold; or the market value of the annual interest on the \$1,300,000,000 coin bonds, if converted into gold bonds, would be enhanced in value over \$9,000,000 per annum.

"Now, sirs, there is no dodging the question. When this bill is passed, there is taken from the pockets of the people \$9,000,000 per annum by congressional legislation and without consideration, except love and affection, and which will be thrown into the opulent laps of the bondholders and national bankers of the country.

"The legislation of money from the pockets of the taxpayers into the pockets of the syndicates now controlling legislation has become so common and so enormous that it is appalling.

"The audacity of this move would be astonishing if Congress had not succeeded in the last few months in voting untold millions into the hands of these syndicates without arousing much public indignation.

"Do you not think that the national bank and bond syndicates have received enough through the vile popular loan scheme wherein there was voted them \$200,000,000 bonds at par, when they were worth in the market at least from 105 to 106, or \$11,000,000 or \$12,000,000 more on the market than face value? And they were voted to them as a gift under the false pretense that they were to go to the poor people of this country, as though they had a right to vote any one these millions, whether rich or poor. Every one knows now, and they should have known then, that it was the speculators' scheme to have the \$11,000,000 or \$12,000,000 of the people's money voted into the pockets of the syndicates. The whole thing was so gauzy and cheap that a great many banks condemned it as a damnable theft. The banks used their customers to subscribe for the bonds, but the banks paid for them and owned them at all times. On the 9th of this month these bonds were worth on the market 109, or \$19,500,000 above par, a gift voted into the pockets of the purchasers.

"The Speaker of this House, Mr. Henderson, Mr. Cannon, Mr. Hopkins, Mr. Hepburn, and many other leading Republicans refused to vote to put 'gold' in this issue, though we could save more than \$16,000,000 thereby, because, as said by Mr. Hopkins, the precedent would cost us

\$100,000,000. However, now these same men are supporting this bill, with its gift of \$100,000,000, under the pressure of a party caucus and a party pressure.

"One of the most essential attributes of a monetary system is to establish a stable standard of value, so that in case of deferred payments and long-time loans the creditor can not collect more than he lent or the debtor pay less than he received.

"This standard must be based on full legal-tender money.

"While a bank currency forms a good circulating medium when times are normal and confidence is unshaken, however it is credit money and it must be paid or redeemed in gold.

"It has been the experience of the financial world that, as the standard of value contracts and as confidence is disturbed, instead of bank paper or other redeemable or credit money expanding it contracts in sympathy with the money in which it is to be redeemed as a standard and as a means of storing values.

"Because gold has been scarcer, it has generally been used for large payments and for storing great values; and silver, because more abundant, has been generally used for divisional coins and small payments and as a means of storing smaller values, and the two conjointly make an ideal currency for the masses of the people.

"If this bill passes, the 89,000,000 Treasury notes, the 346,000,000 greenbacks, and 482,000,000 silver dollars will circulate among the people or will be impounded as the whims of the dictatorship of some great banker at the head of our Treasury may direct."

In the discussion in the Senate, Mr. Vest, of Missouri, argued for a State banking system as against the national banking system, which the measure was designed to strengthen. He said:

"Let each State control its own banking system. Let its legislature determine what kind of security shall be held and how much currency can be issued and what kind of money it shall be redeemed in. Such action will furnish a domestic currency for the use of the people of that State among themselves.

"They only seek to have a medium for their own business. They do not care to have a currency that will go outside of their State. The object is not to have it go away from home. Whatever other pretenses may be made, this means will be antagonized by only one class of people, the money-owning and consequently the money-lending class, since it stands for the best interests and welfare of all others.

"Gen. M. C. Butler, who formerly represented in this body the State which I in part now represent, used the following strong language recently in an open letter to a friend in South Carolina:

"I regard the repeal of the 10-per-cent. tax of far more value to the welfare of the great masses of the people than the free coinage of silver. The present evil in our monetary system is the inadequacy in the volume of currency and the inequality of its distribution—the latter the greater of the two evils. This inequality of distribution would be corrected if we could have local State banks of issue, under proper safeguards, and just so much currency would be put out by them as the local demands required. It has always struck me as very absurd to suppose that any State would or could permit "wild-cat banking," which is about the only argument ever urged against State banks of issue. No State, under our modern methods of transacting business through quick correspondence by mail and wire and the

vigilance of the commercial and business agencies, could tolerate loose or "wild-cat banking" for forty-eight hours, and there is no good reason why State-bank currency could not be made as sound and safe as the present national bank currency.

"I have said the free coinage of silver would inevitably follow the reopening of State banks, and for this reason: These banks would absorb every dollar of coin, both gold and silver, as security for their circulation and to maintain whatever reserve the law might require. For domestic purposes, as a domestic currency, silver is to-day as good as gold. Silver only becomes embarrassing when transactions are had with foreign countries. Like gold, it passes only for its bullion value in foreign countries; but at home it is taken at par of its present weight and fineness. I say, therefore, for all domestic purposes, silver is as good as gold, and there is no reason why it should not be admitted to free coinage and used by local banks as a redemption and reserve fund.

"This scheme of circulation does not require the issuance of a single bond or the payment of a dollar by the United States Treasury in interest. The bonds issued during President Cleveland's administration amounted to \$262,315,400. There was received for the bonds the sum of \$293,454,286.74. The quotation of Fiske & Robinson shows that these bonds are worth to-day in the market \$349,753,866. This makes a profit to the banks of \$36,299,580. The last issue of bonds are now quoted at \$1.10, which gives the banks a profit of \$19,800,000 upon the issue. The bonds are now quoted in New York at \$1.10, at which figure the income is only 1½ per cent. They meet with ready sale, which shows that the Government can borrow money at that figure and that the banks who receive \$6,000,000 a year make a net profit of \$2,500,000 a year upon the last issue of bonds alone. Since 1892 the increase in interest paid annually by the United States has been \$17,000,000. It is now proposed to increase it still further.

"These enormous sums are direct subsidies to the Eastern banks. The total indebtedness of the United States is less than it was in 1892, while the interest charged is over 70 per cent. greater.

"During President Harrison's administration the interest-bearing debt of the United States was \$585,029,330. The noninterest-bearing debt was \$1,000,648,939.37. In the Treasury statement of the public debt for the month of November, 1899, the interest-bearing debt has been increased to \$1,037,049,690. The noninterest-bearing debt has been decreased to \$388,048,760.16. The proposition in this currency bill is to wipe out this non-interest-bearing debt by replacing it with interest-bearing debt. The interest paid by the United States Government in 1892 was \$22,893,883. The interest paid for the fiscal year ended June 30, 1899, was \$39,896,925.02."

The measure was passed by the House Dec. 18.
YEAS—Acheson, Adams, Alexander, Allen of Maine, Babcock, Bailey of Kansas, Baker, Barham, Barney, Bartholdt, Bingham, Boring, Boutell of Illinois, Boutelle of Maine, Bowersock, Brick, Bromwell, Brosius, Brown, Brownlow, Bull, Burke of South Dakota, Burkett, Burleigh, Burton, Butler, Calderhead, Cannon, Capron, Chickering, Clarke of New Hampshire, Clayton of New York, Cochrane of New York, Connell, Cooper of Wisconsin, Corliss, Cousins, Cromer, Crump, Crumpacker, Curtis, Cushman, Dahle of Wisconsin, Dalzell, S. A. Davenport, Davidson, Dayton, Denny, Dick, Dolliver, Dovenor, Driggs,

Driscoll, Eddy, Emerson, Esch, Faris, Fitzgerald of New York, Fletcher, Fordney, Foss, Fowler, Freer, Gamble, Gardner of Michigan, Gardner of New Jersey, Gibson, Gill, Gillett of Massachusetts, Graff, Graham, Greene of Massachusetts, Grosvenor, Grout, Grow, Hamilton, Haugen, Hawley, Heatwole, Hedge, Hemenway, Henry of Connecticut, Hepburn, Hill, Hitt, Hoeffcker, Hopkins, Howell, Hull, Jack, Jenkins, Jones of Washington, Kahn, Kerr, Ketcham, Knox, Lacey, Landis, Lane, Lawrence, Levy, Linney, Littauer, Littlefield, Long, Lorimer, Loud, Loudenslager, Lovering, Lybrand, McAleer, McCall, McCleary, McPherson, Mahon, Mann, Marsh, Mercer, Mesick, Metcalf, Miller, Minor, Mondell, Moody of Massachusetts, Moody of Oregon, Morgan, Morris, Mudd, Needham, O'Grady, Olmsted, Otjen, Overstreet, Packer of Pennsylvania, Parker of New Jersey, Payne, Pearce of Missouri, Pearre, Phillips, Powers, Prince, Pugh, Ray, Reeder, Reeves, Roberts of Massachusetts, Rodenberg, Ruppert, Russell, Scudder, Shattuc, Shelden, Sherman, Showalter, Smith of Illinois, H. C. Smith, Samuel W. Smith, William Alden Smith, Southard, Spalding, Sperry, Sprague, Steele, Stevens of Minnesota, Stewart of New Jersey, Stewart of New York, Stewart of Wisconsin, Sulloway, Tawney, Tayler of Ohio, Thayer, Thomas of Iowa, Thropp, Tompkins, Tongue, Underhill, Van Voorhis, Wachter, Wadsworth, Wanger, Warner, Waters, Watson, Weaver, Weeks, Weymouth, White, Wilson of New York, Wright, Young of Pennsylvania—190.

NAYS—Adamson, Allen of Kentucky, Allen of Mississippi, Atwater, Bailey of Texas, Ball, Bankhead, Barber, Bartlett, Bell, Benton, Berry, Bradley, Brantley, Breazeale, Brenner, Brewer, Brundidge, Burke of Texas, Burleson, Burnett, Caldwell, Carmack, Chanler, Clark of Missouri, Clayton of Alabama, Cochran of Missouri, Cooney, Cooper of Texas, Cowherd, Cox, Crawford, Crowley, Cummings, Cusack, Daly of New Jersey, S. W. Davenport, Davis, De Armond, De Graffenreid, De Vries, Dinsmore, Dougherty, Elliott, Epes, Finley, Fitzgerald of Massachusetts, Fitzpatrick, Fleming, Foster, Fox, Gaines, Gaston, Gilbert, Glynn, Gordon, Green of Pennsylvania, Griffith, Griggs, Hall, Hay, Henry of Mississippi, Henry of Texas, Howard, Jett, Johnston, Jones of Virginia, Kitchen, Kleberg, Klutetz, Lamb, Lanham, Latimer, Lentz, Lester, Lewis, Little, Livingston, Lloyd, McClellan, McCulloch, McDowell, McLain, McKee, Maddox, May, Meekison, Meyer of Louisiana, Miers of Indiana, Moon, Muller, Napphen, Neville, Newlands, Noonan, Norton of Ohio, Norton of South Carolina, Otey, Pierce of Tennessee, Polk, Quarles, Ransdell, Rhea of Kentucky, Rhea of Virginia, Richardson, Ridgely, Riordon, Rixey, Robb, Robbins, Robinson of Indiana, Robinson of Nebraska, Rucker, Ryan of New York, Ryan of Pennsylvania, Salmon, Shackleford, Shafroth, Sheppard, Sibley, Sims, Slayden, Small, Smith of Kentucky, Snodgrass, Sparkman, Spight, Stark, Stephens of Texas, Stokes, Sulzer, Sutherland, Swanson, Talbert, Tate, Taylor of Alabama, Terry, Thomas of North Carolina, Turner, Underwood, Vandiver, Wheeler of Kentucky, J. R. Williams, W. E. Williams, Williams of Mississippi, Wilson of Idaho, Wilson of South Carolina, Young of Virginia, Zenor, Ziegler—150.

NOT VOTING—Bellamy, Bishop, Broussard, Campbell, Catchings, Davey, Gillet of New York, Harmer, Joy, Robertson of Louisiana, Smith of Maryland, Stallings, Vreeland, Wheeler of Alabama—14.

On Dec. 9 the bill was laid before the Senate, re-

ferred to the Committee on Finances, and reported with amendments. It was debated at great length, amended, and passed by that body Feb. 15, 1900, by the following vote:

YEAS—Aldrich, Allison, Beveridge, Burrows, Caffery, Carter, Clark of Wyoming, Cullom, Davis, Deboe, Depew, Elkins, Fairbanks, Foraker, Foster, Frye, Gear, Hale, Hanna, Hansbrough, Hawley, Hoar, Kean, Lindsay, Lodge, McBride, McComas, McCumber, McMillan, Mason, Nelson, Penrose, Perkins, Platt of Connecticut, Platt of New York, Pritchard, Quarles, Ross, Scott, Sewell, Shoup, Simon, Spooner, Thurston, Wetmore, Wolcott—46.

NAYS—Bate, Berry, Butler, Chandler, Chilton, Clark of Montana, Clay, Cockrell, Culberson, Daniel, Harris, Heitfeld, Jones of Arkansas, Jones of Nevada, Kenney, McNery, McLaurin, Martin, Money, Morgan, Pettus, Rawlins, Stewart, Sullivan, Taliaferro, Teller, Tillman, Turley, Vest—29.

NOT VOTING—Allen, Bacon, Baker, Gallinger, Kyle, Mallory, Pettigrew, Proctor, Turner, Warren, Wellington—11.

The Senate substitute for the House measure was entitled "A bill to affirm the existing standard of value, to maintain the parity in value of all forms of money, to refund the public debt, and for other purposes," and it made various important changes. The House nonconcurred in the Senate amendments, a Committee of Conference was appointed and agreed upon a substitute, and the report was adopted March 13. The measure in its final recasting enacts as follows:

"That the dollar consisting of 25.8 grains of gold 0.9 fine, as established by section 3511 of the Revised Statutes of the United States, shall be the standard unit of value, and all forms of money issued or coined by the United States shall be maintained at a parity of value with this standard, and it shall be the duty of the Secretary of the Treasury to maintain such parity.

"SEC. 2. That United States notes, and Treasury notes issued under the act of July 14, 1890, when presented to the Treasury for redemption, shall be redeemed in gold coin of the standard fixed in the first section of this act, and in order to secure the prompt and certain redemption of such notes as herein provided it shall be the duty of the Secretary of the Treasury to set apart in the Treasury a reserve fund of \$150,000,000 in gold coin and bullion, which fund shall be used for such redemption purposes only, and whenever and as often as any of said notes shall be redeemed from said fund it shall be the duty of the Secretary of the Treasury to use said notes so redeemed to restore and maintain such reserve fund in the manner following, to wit: First, by exchanging the notes so redeemed for any gold coin in the general fund of the Treasury; second, by accepting deposits of gold coin at the Treasury or at any subtreasury in exchange for the United States notes so redeemed; third, by procuring gold coin by the use of said notes, in accordance with the provisions of section 3700 of the Revised Statutes of the United States. If the Secretary of the Treasury is unable to restore and maintain the gold coin in the reserve fund by the foregoing methods, and the amount of such gold coin and bullion in said fund shall at any time fall below \$100,000,000, then it shall be his duty to restore the same to the maximum sum of \$150,000,000 by borrowing money on the credit of the United States, and for the debt thus incurred to issue and sell coupon or registered bonds of the United States, in such form as he may prescribe, in denominations of \$50 or any multiple thereof, bearing interest at the rate of not exceeding 3

cent. per annum, payable quarterly, such bonds be payable at the pleasure of the United States for one year from the date of their issue, and to be payable, principal and interest, in gold coin of the present standard value, and to be exempt from the payment of all taxes or duties of the United States, as well as from taxation in any form by or under State, municipal, or local authority; and the gold coin received from the sale of said bonds shall first be covered into the general fund of the Treasury and then exchanged, in the manner hereinbefore provided, for an equal amount of the notes redeemed and held for exchange, and the Secretary of the Treasury may, in his discretion, use said notes in exchange for gold, or to purchase or redeem any bonds of the United States, or for any other lawful purpose the public interests may require, except that they shall not be used to meet deficiencies in the current revenues. That United States notes when redeemed in accordance with the provisions of this section shall be reissued, but shall be held in the reserve fund until exchanged for gold, as herein provided; and the gold coin and bullion in the reserve fund, together with the redeemed notes held for use as provided in this section, shall at no time exceed the maximum sum of \$150,000,000.

"SEC. 3. That nothing contained in this act shall be construed to affect the legal-tender quality as now provided by law of the silver dollar, or any other money coined or issued by the United States.

"SEC. 4. That there be established in the Treasury Department, as a part of the office of the Treasurer of the United States, divisions to be designated and known as the division of issue and the division of redemption, to which shall be assigned, respectively, under such regulations as the Secretary of the Treasury may approve, all records and accounts relating to the issue and redemption of United States notes, gold certificates, silver certificates, and currency certificates. There shall be transferred from the accounts of the general fund of the Treasury of the United States, and taken up on the books of said divisions, respectively, accounts relating to the reserve fund for the redemption of United States notes and Treasury notes, the gold coin held against outstanding gold certificates, the United States notes held against outstanding currency certificates, and the silver dollars held against outstanding silver certificates, and each of the funds represented by these accounts shall be used for the redemption of the notes and certificates for which they are respectively pledged, and shall be used for no other purpose, the same being held as trust funds.

"SEC. 5. That it shall be the duty of the Secretary of the Treasury, as fast as standard silver dollars are coined under the provisions of the acts of July 14, 1890, and June 13, 1898, from bullion purchased under the act of July 14, 1890, to retire and cancel an equal amount of Treasury notes whenever received into the Treasury, either by exchange in accordance with the provisions of this act or in the ordinary course of business, and upon the cancellation of Treasury notes silver certificates shall be issued against the silver dollars so retired.

"SEC. 6. That the Secretary of the Treasury is hereby authorized and directed to receive deposits of gold coin with the Treasurer or any Assistant Treasurer of the United States in sums of not less than \$20, and to issue gold certificates therefor in denominations of not less than \$20, and the coin deposited shall be retained in the Treasury and used for the payment of such certificates on de-

mand, and used for no other purpose. Such certificates shall be receivable for customs, taxes, and all public dues, and when so received may be reissued, and when held by any national banking association may be counted as a part of its lawful reserve: *Provided*, That whenever and so long as the gold coin held in the reserve fund in the Treasury for the redemption of United States notes and Treasury notes shall fall and remain below \$100,000,000 the authority to issue certificates as herein provided shall be suspended: *And provided further*, That whenever and so long as the aggregate amount of United States notes and silver certificates in the general fund of the Treasury shall exceed \$60,000,000 the Secretary of the Treasury may, in his discretion, suspend the issue of the certificates herein provided for: *And provided further*, That of the amount of such outstanding certificates one fourth at least shall be in denominations of \$50 or less: *And provided further*, That the Secretary of the Treasury may, in his discretion, issue such certificates in denominations of \$10,000, payable to order. And section 5193 of the Revised Statutes of the United States is hereby repealed.

"SEC. 7. That hereafter silver certificates shall be issued only of denominations of \$10 and under, except that not exceeding in the aggregate 10 per cent. of the total volume of said certificates, in the discretion of the Secretary of the Treasury, may be issued in denominations of \$20, \$50, and \$100; and silver certificates of higher denomination than \$10, except as herein provided, shall, whenever received at the Treasury or redeemed, be retired and canceled, and certificates of denominations of \$10 or less shall be substituted therefor, and after such substitution, in whole or in part, a like volume of United States notes of less denomination than \$10 shall from time to time be retired and canceled, and notes of denominations of \$10 and upward shall be reissued in substitution therefor, with like qualities and restrictions as those retired and canceled.

"SEC. 8. That the Secretary of the Treasury is hereby authorized to use, at his discretion, any silver bullion in the Treasury of the United States purchased under the act of July 14, 1890, for coinage into such denominations of subsidiary silver coin as may be necessary to meet the public requirements for such coin: *Provided*, That the amount of subsidiary silver coin outstanding shall not at any time exceed in the aggregate \$100,000,000. Whenever any silver bullion purchased under the act of July 14, 1890, shall be used in the coinage of subsidiary silver coin, an amount of Treasury notes issued under said act equal to the cost of the bullion contained in such coin shall be canceled and not reissued.

"SEC. 9. That the Secretary of the Treasury is hereby authorized and directed to cause all worn and uncurrent subsidiary silver coin of the United States now in the Treasury, and hereafter received, to be recoined, and to reimburse the Treasurer of the United States for the difference between the nominal or face value of such coin and the amount the same will produce in new coin from any moneys in the Treasury not otherwise appropriated.

"SEC. 10. That section 5138 of the Revised Statutes is hereby amended so as to read as follows:

"SEC. 5138. No association shall be organized with a less capital than \$100,000, except that banks with a capital of not less than \$50,000 may, with the approval of the Secretary of the Treasury, be organized in any place the population of which does not exceed 6,000 inhabitants,

and except that banks with a capital of not less than \$25,000 may, with the sanction of the Secretary of the Treasury, be organized in any place the population of which does not exceed 3,000 inhabitants. No association shall be organized in a city the population of which exceeds 50,000 persons with a capital of less than \$200,000.

"SEC. 11. That the Secretary of the Treasury is hereby authorized to receive at the Treasury any of the outstanding bonds of the United States bearing interest at 5 per cent. per annum, payable February 1, 1904, and any bonds of the United States bearing interest at 4 per cent. per annum, payable July 1, 1907, and any bonds of the United States bearing interest at 3 per cent. per annum, payable Aug. 1, 1908, and to issue in exchange therefor an equal amount of coupon or registered bonds of the United States in such form as he may prescribe, in denominations of \$50 or any multiple thereof, bearing interest at the rate of 2 per cent. per annum, payable quarterly, such bonds to be payable at the pleasure of the United States after thirty years from the date of their issue, and said bonds to be payable, principal and interest, in gold coin of the present standard value, and to be exempt from the payment of all taxes or duties of the United States, as well as from taxation in any form by or under State, municipal, or local authority: *Provided*, That such outstanding bonds may be received in exchange at a valuation not greater than their present worth to yield an income of $2\frac{1}{4}$ per cent. per annum; and in consideration of the reduction of interest effected, the Secretary of the Treasury is authorized to pay to the holders of the outstanding bonds surrendered for exchange, out of any money in the Treasury not otherwise appropriated, a sum not greater than the difference between their present worth, computed as aforesaid, and their par value, and the payments to be made hereunder shall be held to be payments on account of the sinking fund created by section 3694 of the Revised Statutes: *And provided further*, That the 2-per-cent. bonds to be issued under the provisions of this act shall be issued at not less than par, and they shall be numbered consecutively in the order of their issue, and when payment is made the last numbers issued shall be first paid, and this order shall be followed until all the bonds are paid, and whenever any of the outstanding bonds are called for payment interest thereon shall cease three months after such call; and there is hereby appropriated out of any money in the Treasury not otherwise appropriated, to effect the exchanges of bonds provided for in this act, a sum not exceeding one fifteenth of 1 per cent. of the face value of said bonds, to pay the expense of preparing and issuing the same and other expenses incident thereto.

"SEC. 12. That upon the deposit with the Treasurer of the United States, by any national banking association, of any bonds of the United States in the manner provided by existing law, such association shall be entitled to receive from the Comptroller of the Currency circulating notes in blank, registered and countersigned as provided by law, equal in amount to the par value of the bonds so deposited; and any national banking association now having bonds on deposit for the security of circulating notes, and upon which an amount of circulating notes has been issued less than the par value of the bonds, shall be entitled, upon due application to the Comptroller of the Currency, to receive additional circulating notes in blank to an amount which will increase the circulating notes held by such association to the par value of the bonds deposited, such additional

notes to be held and treated in the same way circulating notes of national banking associations heretofore issued, and subject to all the provisions of law affecting such notes: *Provided*, That nothing herein contained shall be construed to modify or repeal the provisions of section 5167 of the Revised Statutes of the United States, authorizing the Comptroller of the Currency to require additional deposits of bonds or of lawful money to secure the market value of the bonds held to secure the circulating notes shall fall below the par value of the circulating notes outstanding which such bonds may be deposited as security: *And provided further*, That the circulating notes furnished to national banking associations under the provisions of this act shall be of the denominations prescribed by law, except that no national banking association shall, after the passage of this act, be entitled to receive from the Comptroller of the Currency, or to issue or reissue in place in circulation, more than one third the amount of its circulating notes of the denomination of \$5: *And provided further*, That the total amount of such notes issued to any such association may equal at any time but shall not exceed the amount at such time of its capital stock actually paid in: *And provided further*, That any regulations to be prescribed by the Secretary of the Treasury any national banking association may substitute the 2-per-cent. bonds issued under the provisions of this act for any of the bonds deposited with the Treasurer to secure circulation or to secure deposits of public money; and much of an act entitled 'An act to enable national banking associations to extend their corporate existence, and for other purposes, approved July 12, 1882, as prohibits any national bank which makes any deposit of lawful money in order to withdraw its circulating notes from receiving an increase of its circulation for the period of six months from the time it made such deposit of lawful money for the purpose aforesaid, is hereby repealed, and all other acts or parts of acts inconsistent with the provisions of this section are hereby repealed.

"SEC. 13. That every national banking association having on deposit, as provided by law, bonds of the United States bearing interest at the rate of 2 per cent. per annum, issued under the provisions of this act, to secure its circulating notes shall pay to the Treasurer of the United States, the months of January and July, a tax of one fourth of 1 per cent. each half year upon the average amount of such of its notes in circulation are based upon the deposit of said 2-per-cent. bonds; and such taxes shall be in lieu of existing taxes on its notes in circulation imposed by section 5214 of the Revised Statutes.

"SEC. 14. That the provisions of this act are not intended to preclude the accomplishment of international bimetallicism whenever conditions shall make it expedient and practicable to secure the same by concurrent action of the leading commercial nations of the world and at a ratio which shall insure permanence of relative value between gold and silver."

The most compact statement of the changes in the measure is that of the House members of the Conference Committee. It is as follows:

"The effect of the conference agreement is a change along similar lines adopted in the original House bill, with the exception that the plan for the funding of the public debt, agreed to by the Senate, has been accepted as a part of the bill submitted by the Conference Committee. The bill herewith submitted retains the same arrangement as to subjects as in the original House bill.

"The first change from the House bill is in phraseology and arrangement of section 1. While the House bill originally confined the first section to the definition of the standard of value, the new section embodies with the definition the declaration for the maintenance of parity of all forms of money issued or coined by the United States, and the duty of the Secretary of the Treasury to maintain such parity.

"The next change is in section 2, where the provision for payment of interest-bearing obligations is omitted, for the reason that the same result is obtained by the refunding of the public debt into gold-bearing bonds. The provision for the payment of private obligations, in conformity with the gold standard, is also omitted from section 2. The provision in the same section relative to the legal-tender quality of the silver dollar and other money coined or issued by the United States is placed in a new section, designated as section 3.

"The next change is the arrangement relative to the gold reserve fund for the redemption of United States notes and Treasury notes. This provision is found in section 4 of the House bill, but is changed to section 2 of the bill agreed upon, and is made a fixed amount of \$150,000,000, instead of one fourth of the outstanding United States notes and Treasury notes. Provision is also made for replenishing said fund whenever reduced below 100,000,000. In this change the reserve fund is limited exclusively to the redemption of United States notes and Treasury notes, and the provisions for maintaining said reserve fund are modified by directing specifically that such fund may be replenished by exchange of redeemed notes for gold from the general fund of the Treasury, or by exchange for gold under section 3700, Revised Statutes. A further change in this same section permits the use of United States notes, when redeemed, for the purchase or redemption of any bonds of the United States, or for any other lawful purpose the public interest may require, except that they shall not be used to meet deficiencies in the current revenues.

"The next change is in the phraseology of section 3 of the House bill, which is made section 4 of the new bill, relative to divisions of issue and redemption, which changes specifically direct the use of the funds pledged for the redemption of outstanding notes and certificates to the sole purpose of such redemption, said funds being held as trust funds.

"The next change is the acceptance of the section in the Senate bill, being section 5 of the bill herewith submitted, providing for the retirement and cancellation of United States Treasury notes whenever received into the Treasury, such cancellation to take effect as standard silver dollars are coined, under the provisions of the acts of July 1, 1890, and June 13, 1898.

"The next change is the acceptance of the Senate provision, being section 6 of the bill herewith submitted, authorizing the issue of gold certificates for the deposit of gold coin. The provision in the Senate bill was modified by change of phraseology, limiting the issue of such gold certificates under certain directions of the Secretary of the Treasury. This section also contains provision for the cancellation of United States currency certificates.

"Sections 5 and 6 of the House bill are accepted and made sections 8 and 9 of the bill agreed upon. The only change being a limitation of issue of subsidiary coin to \$100,000,000, instead of an unlimited issue permitted by the repeal of the present statute, as was originally provided for in section 6 of the House bill.

"The next change is in section 7, which is also section 7 of the bill agreed upon. The original House bill provided for the issue of United States notes in such denominations, not less than \$1, as the Secretary of the Treasury might prescribe, and the issue of silver certificates in denominations only of \$1, \$2, and \$5, and the reconversion of silver certificates of denominations above \$5 into lower denominations. These provisions are so changed that silver certificates shall be issued in denominations of \$10 and under, except that not exceeding in the aggregate 10 per cent. of the total volume of silver certificates may be issued in denominations of \$20, \$50, and \$100. All silver certificates of denominations higher than \$10, except the proviso concerning 10 per cent. of the aggregate of certificates, shall, when received at the Treasury, be retired and canceled, and certificates of denominations of \$10 or less shall be substituted therefor, and a like volume of United States notes of less denomination than \$10 shall be retired and canceled and notes of denominations of \$10 and upward reissued in substitution therefor.

"The next change is the dropping out of sections 8 and 9 of the House bill. These two sections of the House bill made provision for the increase of bank-note circulation to the par value of the bonds deposited, not exceeding, however, the amount of the capital stock paid in, this principle having been embodied in section 12 of the bill agreed upon.

"The next change is the dropping out of section 10 of the House bill, which provided for the taxation of franchises of national banks and the repeal of the statute imposing a tax upon bank-note circulation.

"The next change is in section 11 of the House bill, whereby the limit of population in a place where a national bank of \$25,000 capital stock may be organized is fixed at 3,000 inhabitants, instead of 2,000 inhabitants, as specified by the House bill. This section becomes section 10 of the bill agreed upon.

"Sections 11, 12, and 13 of the bill agreed upon make provision for the refunding of the 5-per-cent. bonds of 1904, the 4-per-cent. bonds of 1907, and the 3-per-cent. bonds of 1908 into 2-per-cent. gold-bearing bonds. Permission is thereby given to all national banks exchanging any bonds of the above-mentioned classes for the 2-per-cent. bonds to increase their note circulation to the par value of the bonds, not in excess, however, of the capital stock paid in; and provides, further, that in case of such exchange the tax upon the bank-note circulation of such banks shall be one fourth of 1 per cent. each half year upon the average amount of such of its notes in circulation as are based upon the deposit of said 2-per-cent. bonds.

"Section 14 of the bill agreed upon provides that 'this act is not intended to preclude the accomplishment of international bimetalism whenever conditions shall make it expedient and practicable to secure the same by concurrent action of the leading commercial nations of the world and at a ratio which shall insure the permanence of relative value between gold and silver.' This section has no legislative effect different from existing law, and is merely declaratory that any future effort in that direction shall not be foreclosed by the enactment of this act.

"The title of the bill remains the same as the title of the House bill, except that the words 'to refund the public debt' are made a part of the title."

The President approved the measure March 14, 1900.

The Porto Rico Measures.—Though of far less intrinsic importance than the financial measure, the bill "temporarily to provide revenues and a civil government for Porto Rico, and for other purposes" took up even more time for discussion, as it involved a constitutional issue as to the standing of our new possessions. Legislation began with a bill, introduced Jan. 19, 1900, by Mr. Payne, of New York, "to extend the laws relating to customs and internal revenue over the island of Porto Rico, ceded to the United States." The measure was referred to the Committee on Ways and Means, and, Feb. 8, Mr. Payne reported a substitute from that committee, recommending its passage. The purpose of the substitute was to prevent the policy of the original measure. It established the tariff of the United States in Porto Rico, so far as imports from foreign countries were concerned, but also provided for a duty of 25 per cent. of our regular tariff rates on trade between that island and the United States, and an additional duty on certain articles equal to the amount levied on them for internal revenue. The fund that should be raised in this way was to be kept separate, and put in the hands of the President, to be used for the government and the benefit of Porto Rico.

In supporting the bill, Mr. Payne made a statement as to the acquisition of the island, and gave statistics as to its inhabitants and their industries, and then put clearly the hardships that followed the political changes wrought by the recent war. He said:

"Spain collected in taxes from these people over 5,000,000 pesos annually. A peso is a Spanish or Porto Rican silver dollar, containing about 93½ per cent. as much silver as an American silver dollar. It is worth now in the market 41 cents; but by an Executive order it was made exchangeable in United States money at the rate of 60 cents for a peso. So it was worth 60 cents of our money. Spain collected these 5,000,000 pesos from these people. But instead of building schoolhouses or providing a school system, they took about half of this money to support the Spanish army and navy and to help out poor Spain from year to year.

"The exports of the island were about 17,000,000 pesos and the imports about the same amount. The three principal items of export were coffee, sugar, and tobacco, in the order named. About 60 per cent. of the total exports was coffee, about 20 per cent. sugar, and about 5 per cent. tobacco. The market for the coffee was found principally in Spain, and also in Cuba. That which went to Spain found its way to France and Germany, and some of it to the United States, where it is sold for the best Mocha and the best Java, and I am told by competent experts that the best grades of it are fully equal if not superior to any Mocha or Java coffee that can be bought anywhere in the world.

"When the war was over Spain put a prohibitive duty on coffee, as she did upon tobacco, and a corresponding duty upon sugar. Cuba, which we hold in trust, demanded of the United States that we put a duty upon Porto Rican coffee and Porto Rican tobacco. A large portion of the tobacco crop was brought to Cuba in the years gone by free of duty, and there it was made up into cigars, sometimes mixed with Havana tobacco and sometimes not, but most of it came to the United States in the shape of the best Havana tobacco. The better qualities of this were exported. There were some minor grades that went to Europe, principally to Germany, selling at 5 or 10 cents a pound.

"The export of tobacco was 4,000,000 pounds annually. One year it went up to 6,000,000 pounds,

but the normal average exports were 4,000,000 pounds. They raise a million or two pounds more which are consumed in the island. These were made into cigars and cigarettes by the natives and sold there.

"Of sugar about three fifths came to the United States and two fifths went to Spain. That is about the proportion that has been exported to the United States for the last ten years. Some of the tobacco perhaps we got two thirds of it. So that a part of the sugar market was in Spain and the rest in the United States. Spain cut off the market for sugar, cut off the market for coffee, cut off the market for tobacco, which was 85 per cent. of their exports, and left the people without a market for these commodities, save that they had in the United States.

"In addition to that, Cuba demanded of our Government not only a duty on coffee which was prohibitory, but a duty of \$5 a pound on tobacco which was also prohibitory, and under which no pound could be exported to Cuba.

"Well, these Porto Ricans began to feel that though they had been made the victims of misplaced confidence. When they saw the flag flying up and knew that 'prosperity followed the flag' as a matter of course they expected to get a little of that prosperity themselves. Instead of that the first result was to cut off these markets. More than that, on the 8th of August last there occurred there a storm, or hurricane, which swept the island from end to end; such a storm as had not been known there since 1867. This occurred at a time when they were just getting ready to harvest the crop of coffee, which then bade to be a great crop.

"One man, an extensive coffee planter, estimated that the entire output of coffee would exceed that of any previous year by 7,000,000 pesos in value. The normal crop is somewhere about 8,000,000 to 10,000,000 pesos. This crop, which was expected to be a double crop, was by the storm wiped out of existence, because the winds swept the berries from off the bushes, and then the rain descended so that when the sun came out there was nothing left but the dry and shriveled part, of no value whatever. Not 10 per cent. of the ordinary crop was harvested in consequence of the effect of the storm. And that was not the worst of it. The market had been tied up for a year by these severe tariff rates in Cuba and Spain; the normal crop of the year before was sheltered in their huts and in crudely constructed buildings all over the land. The wind razed those huts to the ground, destroying the greater portion of the crop of the previous year. So a double calamity came upon these people.

"The winds did great damage and created great desolation. In addition to the damage to the sugar crop and the tobacco crop, more than 2,000 people perished in the storm, while hundreds of thousands were turned out of their rude homes, sheltered to the blasts that beat upon them.

"This was the condition in August last. These people, who had begun to despair under what had come to them from the loss of the market, had still more reason to despair because of the devastation by this terrible storm.

"Mr. Chairman, after I had heard these representations from the gentlemen who appeared before the Committee on Insular Affairs, particularly the report of that honorable, able, and competent official, Brig.-Gen. Davis, who is now the military commander, it seems to me that Congress ought to afford some relief as quickly as possible to the people of these islands. The President had recommended that we give them free trade with

ited States. The Secretary of War had also recommended it in his report; and without consultation with any one, on my own individual action, I introduced a bill and had it referred to the Committee on Ways and Means, establishing customs ports in Porto Rico, giving to the people that island free trade with the United States, and between the United States and the ports of that island, and also extending the internal revenue laws to the island and the islands adjacent to Porto Rico. I wanted to relieve these people from the position in which they were placed.

My own sympathies were entirely enlisted in their behalf. I sympathized with their distress as I sympathize to-day. They have not rebelled; they have not raised their arms against the Government of the United States; they have submitted quietly, and I wanted to do something for their relief."

Mr. Payne then went on to state the considerations which led him to change his original scheme, and gave reasons why he thought the new one more benevolent:

The first thing that was to be considered in devising a plan for the revenues of the island—because the money was to be expended there—was to provide a government for the island. Gen. Davis, a careful investigator, says that the expenditure would amount to \$1,943,678.71 next year. It would only allow about \$350,000 for the schools and about \$300,000 for the highways. We must meet this question, therefore, and provide revenue for the support of the island. If we are to provide for these necessities it must be done by taxation in some way, or else we can not help the island. Where would it be best, then, to direct attention in placing that taxation? That was the nature of the question that confronted us, and that we had to consider.

I sought Gen. Davis. I sought other men who were acquainted with the circumstances, knew the ports, knew the revenues, knew all the surroundings in Porto Rico, and I was assured that I could collect not exceeding \$500,000 from the tariff and \$500,000 from the internal revenue, in \$1,000,000, to meet \$2,000,000 of expenditures. When I began to look around me and saw what met the internal revenue taxes would have upon the people of these islands.

They manufacture there annually 1,500,000 gallons of rum. It is sold all over the island. It is a necessity of life, or they think so, for the poor people of that island. These 1,500,000 gallons sail all at from 25 to 40 cents a gallon. The internal revenue tax upon that, under the law that was about to extend, would amount to \$1.20 a gallon. The price to these people would be multiplied by four. How could they get their rum? They were cutting it off.

Well, now, some gentlemen may say they would be better off without the rum. I think that self; that constitutionally and in the matter of saving up money they would be better off without the rum, but they have been used to it all their lives. They are poor people, and when a government comes along and arbitrarily cuts off from a community that has been accustomed to it, every man of whom wants it, why there is need to be trouble, and there would have been trouble with those Porto Ricans if we had passed that act in that way to cut off their supply of rum.

In addition to that, Porto Rico has been importing from Cuba \$1,500,000 worth of cigars from year to year. The Porto Ricans have made 100,000 pounds of their own tobacco up into cigars and cigarettes and sold them over the island year after year.

"Gen. Davis says it will be very difficult to collect this tax on tobacco. 'I suppose there are 2,000 or 3,000 shops in Porto Rico. A man has a hut in which he lives in one room, and in another sells a little rum, rolls cigarettes and sells them, and sells tobacco, and cigars, and fruits, and beans, and codfish, and has a general store, and he is in himself a tobacco manufacturer and retailer, saloon keeper and grocer.'

"Suppose we applied our internal revenue taxes to these items? This is the cheap tobacco, cheaply made up, thrown together into cigars for the poor people of the island, these people whose coffee crop has been annihilated, and hundreds of thousands of whom have depended upon the charity of the good people of the United States to keep them from starving and to furnish them shelter, the only relief that they have received thus far from becoming a part of the territory of the United States.

"Mr. Chairman, the taxation would simply have destroyed these industries and would not have given us any appreciable revenue, no money for schools, no money for highways, no money for anything except the hard, stern realities of governing those people. So as a revenue raiser the bill which I first introduced was a failure, and, as I understand it, the first and paramount thing in a tariff bill, under the idea of the Republican party, always has been to raise sufficient revenue to support the Government as we go along.

"Then the further question came along, Mr. Chairman, how much we were giving to these producers of sugar under the bill as first introduced. It would only benefit a moderate percentage of the people. They had been selling and sending abroad 58,000 tons of sugar, on an average, annually.

"According to the statistics, they have 76,000 acres in sugar plantations. Other gentlemen say that they average a production of a ton to an acre, and that it takes a man to cultivate an acre, or 60,000 people to cultivate this sugar during the season. These men would be benefited by free sugar, and the owners of the plantations, some of them small ones and some of them with 700 and the largest with 1,500 acre plantations, would receive the direct benefit. If the Porto Rican is the shrewd man that they say he is, and I hope and trust he may prove so, the laborers on those sugar plantations would get a part of this benefit, but largely, of course, as we all know, it would go to the planter and to the factory and to the merchant.

"I understand there are some 3,000,000 pounds of tobacco now in the hands of the merchants ready to be exported. Who will get the benefit of the reduction of the duty on tobacco? Why, the merchants in the first instance; afterward the planter. Would it not be fair that these people who get the greatest benefits should pay the expense of the government?

"Suppose we cut off 75 per cent. of the duty which they now have to pay to get into our markets and present it to them. How much does that mean to the producers of sugar and to the producers of tobacco in these islands?

"The estimate is that they will produce and sell and export 45,000 tons of sugar this year. It must all come to our market, because the Spanish market is absolutely cut off. Suppose we remit this duty. What does it mean?

"This will not injure our industries. We consumed 2,000,000 tons of sugar last year. We imported about 1,400,000 tons on which we paid duty. We also imported 300,000 tons from Hawaii, which came in free of duty. The balance was produced in this country. Our increased consumption amounts to from 50,000 to 100,000 tons annually.

If this 60,000 tons comes in from Porto Rico, it will be but a drop in the bucket. Even should it double in quantity it could have no influence on our market. Our sugar producers have nothing to fear if we stop with sugar from Porto Rico at the duty in this bill.

"Nor will this bill injure the tobacco industry. Their tobacco is quite different from ours. The best of it ranks with the Cuban or nearly so. Nearly all of it is filler tobacco and very little is fit for wrappers. My own impression is that it will add to the sale of wrappers in the United States and make a better market for our tobacco growers. I have yet to see the tobacco man who fears the introduction of the Porto Rican product.

"Their great fear is that if we should give free trade to Porto Rico we should follow it with free trade with the Philippine Islands, and ultimately with Cuba. Neither they nor the sugar producers fear anything from Porto Rico alone, and when Congress asserts its power under the Constitution to deal in the manner proposed by this bill with this territory, it gives them renewed confidence to believe that Congress has the power and can be trusted to care for their interests when we come to deal with the other islands.

"I find from the Bureau of Statistics that the sugar imported into this country in 1898 under 16 Dutch standard of color brought an average price of 2 cents, and in 1899 an average price of 2.2; that the average duty paid upon the sugar was 1.57 in 1898 and 1.63 in 1899—that is, \$1.63 a hundred pounds, an average of \$1.60 a hundred for the two years upon sugar such as these men would export to the United States. That makes a pretty figure if you remit all that duty of \$1.60 a hundred pounds, or \$35.84 for a long ton, a total of \$1,600,000 on the 45,000 tons that they will export to the United States this year. Suppose we take a quarter of that and give them three fourths.

"Suppose we take \$400,000, or rather give it into the hands of the President of the United States, in order to carry out the benevolent object of building roads and building schoolhouses for these Porto Ricans; are we not dealing more generously with these whole people to do that—that is, to provide schools on the mountains and on the mountain sides, where the poor coffee planters are struggling along for an existence—than to give the whole of it to the sugar planters and let the schools go?

"So with tobacco. I find that the whole duty on their 4,000,000 pounds of tobacco, at 35 cents a pound, would amount to \$1,400,000. We might give this to the tobacco planters, because on all these articles, gentlemen, make no mistake, the price of sugar and the price of tobacco is made in the United States, and they have to pay these duties to get into our markets. And if we remit the duty, we remit for them. Suppose we say, then, we will divide with these people; that we will give them \$1,000,000 out of their duty on tobacco, and take \$350,000 and add it to the revenues to come from these islands."

Anticipating that the opposition to the measure would rest mainly on the denial of its constitutionality, Mr. Payne made an argument for the authority of Congress, saying in conclusion:

"I want to make this further suggestion. Gentlemen who are lawyers are honestly divided on this question—this constitutional question. We believe that the United States means the United States, in the Constitution, and that the words that are added, giving us power to dispose of and make rules and regulations respecting the territory and other property belonging to the United States, refer to a different subject from the United States itself—to territory belonging to the United States.

We believe that there is that plain distinction. Some gentlemen profess to believe otherwise.

"If this bill is passed it will give the Supreme Court of the United States the first opportunity it has ever had to meet that question fairly and squarely and say whether the limitation for uniform taxation in the United States refers to the United States or to the United States and the territory belonging to the United States. It may be an important question to be considered in the future when we come to legislate for the Philippine Islands, when we come to legislate, if we have to, with respect to Cuba, and I think it would be a good proposition to submit that question now to the Supreme Court. If you are right, gentlemen, in your contention we shall have difficulty when we come to legislate for our other islands. We shall have difficulty in protecting the interests of the people, the manufacturers, the farmers of the United States. If we are right in our contention, our way is more simple.

"As for the people of Porto Rico, I would move as fast as their own good will warrant. Pass this bill, which even the gentleman from Massachusetts admits is a well-considered measure from a fiscal standpoint, and give them better markets and abundant revenue. Do not tie down their destinies to the whim of the 88 per cent. illiterate or to the caprice of the 12 per cent. of the educated, who have known no government except Spanish misrule. Keep them all in leading strings until you have educated them up to the full stature of American manhood, and then crown them with the glory of American citizenship. In the meantime give them all the rights accorded to our own people under the Constitution, consistent with their best interest and well-being.

"Our duty now, Mr. Chairman, is, in the first place, to restore, nay, to give law and order in the Philippine Islands, then to investigate, then to legislate, remembering that these people are uneducated, remembering that it would be unsafe to give the full power of government to the illiterates or to those who can read and write.

"The rights of neither would be preserved. The rights of either would be unsafe.

"We can proceed as did the fathers a hundred years ago, who had no scruples on that question, but believed that Congress had the absolute power over the territory of the United States.

"It is our duty to take these poor people and educate them and lift them up and give them the privileges of the Constitution and the privileges of government as they shall grow in education and in knowledge.

"And finally, whether we send them forth among the nations of the earth or annex them as States in this Union, we will bring them up to the full level and stature of American manhood. Wherever the flag is raised it shall not go down until it covers beneath its folds a people enjoying the blessings of civilization, of freedom, and of sovereign citizenship."

Opening the discussion in opposition to the measure, Mr. Richardson, of Tennessee, said:

"Mr. Chairman, I am not an alarmist. Those on this floor who know me and have done me the honor to listen to what I have had to say on former occasions when speaking to pending measures will bear me witness that I have not been accustomed to indulge in extravagant statement or vehement denunciation. I endeavor at all times to be conservative, and I may add I am naturally inclined to optimism. With this much of preface of a personal character, I begin by saying that in my judgment the pending bill is more dangerous to the liberties of the people of this republic than any

measure ever before seriously presented to the American Congress. It will prove more far-reaching in its provisions and disastrous in the results than must of necessity follow if it should be enacted into law than any act ever passed by Congress."

He went on to declare that the ground of opposition would be constitutional:

"Those of us who oppose this measure, I believe without exception, maintain that the bill can not be enacted into law without a total disregard and violation of not simply the spirit but the express letter of the Constitution. In the report the majority of the committee say:

"Upon the whole we conclude:

"First. That upon reason and authority the term "United States," as used in the Constitution, has reference only to the States that constitute the Federal Union and does not include Territories.

"Second. That the power of Congress with respect to legislation for the Territories is plenary.

"Third. That under that power Congress may prescribe different rates of duty for Porto Rico from those prescribed for the United States."

"The claim or contention thus made was never before set up on the floor of Congress in so far as we know. This country has grown from a small and feeble territory on the Atlantic Ocean, with about 27,000 square miles, to the mightiest republic of this earth, with an area of 3,500,000 square miles. It has increased in population from 3,000,000 to over 70,000,000. This marvelous expansion to continental growth and grandeur has all taken place within about one hundred years. The Louisiana territory, Florida, Texas, California, New Mexico, Oregon, and Alaska have all been acquired under our Constitution without a jar or strain to any of its wise and beneficent provisions and without any demand for its amendment. This growth was a natural expansion. Then these acquisitions were of desirable lands without people, but we should beware of the acquisition of undesirable people without lands. I am partisan enough to stop here sufficient time to call attention to the fact that every foot of this vast domain was acquired and annexed under Democratic Presidents.

"An exception to this statement may possibly be taken by some so far as it applies to Alaska; but it will not be denied that Alaska was acquired while Andrew Johnson, a Democrat, was President. These acquisitions of territory were wise and proper to be made. The Democratic party has always favored proper expansion. Here permit me to say with great emphasis that those of us opposing this measure are not basing our opposition to it on the ground that it is a measure for expansion. This is not a measure of expansion. Whether the constitution of the United States is extended to the island of Porto Rico, *ex proprio vigore*, or not, it must be admitted that when we enter upon legislation for the island, as Congress will do if it passes this bill, that question will be put at rest and the territory will then be a part of the United States. "The control of the President and of the military will have ceased and the expansion as to the island will have been completed. Legislation by Congress for the island at once makes it a part of the United States. If this bill passes, it must follow that it is then a part of the United States. This being true, the proposition which this bill carries for unequal taxation of the island as a portion of the United States is the baldest form of imperialism.

"The opposition to this bill plants itself upon this ground. The measure is imperialism itself. In the former acquisitions to which I have referred no such measure as the pending one was ever pro-

posed or deemed necessary. When the Louisiana territory was acquired, when Texas was annexed, when California and Arizona and New Mexico and other Territories were acquired, did any man rise in this House or the other body of this Congress and offer such a legislative proposition as the pending one? This effort, therefore, clearly marks the dividing line between all former acquisitions and that of Porto Rico, if it be conceded that the enactment of the proposed bill into law is required."

The bill passed the House, Feb. 28, by a vote of 172 yeas to 160 nays; not voting, 21. It had been amended so as to reduce the tariff on Porto Rico goods from 25 per cent. of the regular rates to 15 per cent. The full text of the measure was as follows:

"Whereas, The people of Porto Rico have been deprived of markets for a large portion of their products, and have lost property and crops by severe and unusual storms, whereby they are impoverished and are unable to pay internal revenue and direct taxes; and

"Whereas, Temporary revenue is necessary for their schools, their roads, and their internal improvements, and the administration of their government; now, therefore,

"Be it enacted, etc., That the provisions of this act shall apply to the island of Porto Rico and to the adjacent islands and waters of the islands lying east of the seventy-fourth meridian of longitude west of Greenwich, which was ceded to the United States by the Government of Spain by treaty concluded April 11, 1899; and the name Porto Rico, as used in this act, shall be held to include not only the island of that name, but all the adjacent islands as aforesaid,

"SEC. 2. That on and after the passage of this act the same tariffs, customs, and duties shall be levied, collected, and paid upon all articles imported into Porto Rico from ports other than those of the United States which are required by law to be collected upon articles imported into the United States from foreign countries.

"SEC. 3. That on and after the passage of this act all merchandise coming into the United States from Porto Rico and coming into Porto Rico from the United States shall be entered at the several ports of entry upon payment of 15 per cent. of the duties which are required to be levied, collected, and paid upon like articles of merchandise imported from foreign countries; and in addition thereto upon articles of merchandise of Porto Rican manufacture coming into the United States and withdrawn for consumption or sale upon payment of a tax equal to the internal revenue tax imposed in the United States upon the like articles of merchandise of domestic manufacture; such tax to be paid by internal revenue stamp or stamps to be purchased and provided by the Commissioner of Internal Revenue and to be procured from the collector of internal revenue at or most convenient to the port of entry of said merchandise in the United States, and to be affixed under such regulations as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall prescribe; and on all articles of merchandise of United States manufacture coming into Porto Rico in addition to the duty above provided upon payment of a tax equal in rate and amount to the internal revenue tax imposed in Porto Rico upon the like articles of Porto Rican manufacture.

"SEC. 4. That the duties and taxes collected in Porto Rico in pursuance of this act, less the cost of collecting the same, and the gross amount of all collections of duties and taxes in the United States upon articles of merchandise coming from Porto Rico, shall not be covered into the general fund

of the Treasury, but shall be held as a separate fund, and shall be placed at the disposal of the President to be used for the government and benefit of Porto Rico until otherwise provided by law.

"Sec. 5. This act shall be taken and held to be provisional in its purposes and intended to meet a pressing present need for revenue for the island of Porto Rico, and shall not continue in force after the 1st day of March, 1902."

In the Senate a bill had been introduced early in the session "to provide for the government of Porto Rico and other purposes," and when the House bill came up for consideration it was referred to the Committee on Pacific Islands and Porto Rico, and that committee reported it with an amendment in the form of a substitute, which was the Senate bill for the government of the island slightly modified. This measure defined the term Porto Rico as including that island and those adjacent, and made San Juan the capital. It declared the political status of the people; continued existing laws in force excepting those in which religion was an element; extended the laws of commerce and navigation over the islands; provided for quarantine stations; established the value of the silver coins, and made United States coins legal tender; adopted the rate of duty in the House bill on trade between the United States and Porto Rico, to be collected until March 2, 1902; made the island an internal revenue district; and declared the authority of all United States statutes not locally inapplicable.

The measure provided also for a governor, to be appointed by the President, by and with the advice and consent of the Senate, and having the usual powers of a territorial executive. It established also an executive council, consisting of a secretary, attorney-general, auditor, treasurer, and commissioner of education, with the usual authority of such officials, and five other members, all to be appointed by the President, and at least five to be natives of Porto Rico. It created a body, to be called the House of Delegates, the members to be elected by the people, and constituting, with the Executive Council as an upper house, the local Legislature of the island. It provided for a local supreme court and district courts, and made the island a judicial district of the United States.

The measure was passed by the Senate, April 3, by a vote of 40 yeas to 31 nays; not voting, 16.

April 11 the House concurred in the Senate amendments, in gross, by a vote of 161 yeas to 153 nays; not voting, 37.

Outside of Congress there was no little Republican opposition to the measure, and that element of hostile opinion was represented in the speech of Congressman H. C. Smith, of Michigan. He said:

"This bill puts it upon the statute books, where it may be read of all men, for all the days of coming time, that the general in command of our armies, appointed by the commander in chief of the armies of the republic, may not have his promises carried out—promises ratified by two years of silence, ratified by the opinion and report of the Secretary of War, ratified by the public speeches of the President, and ratified by the President's message, written in unfading ink, on parchment that will outlast time.

"We can not, as a nation, afford to say to the world and to the people of the earth that such promises may be repudiated and are only to be used to stimulate false hopes in the throbbing bosoms of oppressed subjects.

"And we are told that the plain duty to give to the Porto Ricans free trade did not mean a pres-

ent duty, but that we were to do this by and by, at some more convenient season.

"I can not bring my judgment and my conscience to the support of such shuffling and backsliding faith.

"To my mind, our obligations are moral, not constitutional. The people of Porto Rico, civilized as well as barbarous, are to be, under the new dispensation, cut off from every benefit supposed to be bestowed by the American system of government.

"They are not to be represented in the American Congress. The tariff is a tariff against our own territory. They are left nothing but a dead market. This is the Roman method, 'Make solitude and call it peace.' It is simply despotism with no regard for the rights of man.

"The bill ignores the great principle that government is for the benefit of the governed. This is a time for candor.

"General Miles, when first landing American forces on the island, promised the Porto Ricans that they should enjoy the same rights and privileges and immunities as the people of the United States. With this understanding did the Porto Ricans accept American sovereignty not only without opposition, but with joyful trust and confidence.

"This great republic can not afford to break faith with the little island of Porto Rico. If we break the pledge of General Miles, we ought to give up the fruit which called forth that promise.

"The people are therefore opposed to this measure, and the national heart and the national conscience has been stirred to the deepest depths.

"There is nothing in the language of the Constitution, in my judgment, which makes the bill unconstitutional.

"I believe that the power of Congress over all territory outside the boundary lines of the States is coextensive with the power of the English Parliament.

"The power to govern such territory is found necessarily, under our system somewhere. It certainly has not been reserved to the States. The jurisdiction of a State is confined strictly to its own territory.

"But this act violates the common law of England and America, which requires that taxation shall be uniform.

"This is not a new question. The old stamp act and the duties on tea of George III and his Parliament are in point.

"Every single argument that can be made in favor of the Porto Rico bill was advanced in favor of those acts. We all know how they were regarded in this country—what Adams, Otis, and Jefferson thought of them.

"A certain cargo of tea was thrown into Boston Harbor. Is there any particular reason why another cargo should not be dumped into the Gulf of Mexico?

"In my judgment, the Republican party can not afford to follow the example of George I. now or hereafter.

"I am an expansionist, but I am unconditionally in favor of treating the inhabitants of our territories, at home and abroad, with simple justice. Equality is equity, and equality is the soul of liberty.

"The question involved is not protection, but equal taxation. Abraham Lincoln freed 4,000,000 physical slaves. Are we going to emulate that example in the islands of the sea, or are we, for the sake of selfish interest, and in spite of the pledge of the President, going to fasten commercial slavery upon them?

"The provision of our Constitution—'The taxes, duties, and imposts shall be uniform throughout the United States'—was placed there for a purpose, and the purpose was to insure the absolute equality and sisterhood of the States.

"The framers of the Constitution saw with prophetic vision that the differing soil, climate, waterways, and circumstances of one part might naturally lead to the advantage of one part and the disadvantage to another, of our great domain. That it would breed rivalry, strife, and discontent; that one part would become more valuable and influential than another.

"That the money gathered from tariff might be more beneficial and useful to one portion of the country than another, as the pensions are now paid largely in the North.

"To prevent this strife and turmoil and contest, and that we might really become one family—a sisterhood of States—it was determined in the beginning that no State should be discriminated against in or in favor of, as concerning duties and imposts.

"This bill is taxation without representation. It is idle and childlike that we should gather money from them, turn it over to them, expend it for them and for their advancement, instead of permitting them to raise the money themselves, or themselves, and expend it as they see fit.

"In this land of equity and equality it can not be right that they should be taxed without having any voice as to the method of taxation or the use that shall be made of the money.

"To my mind the amount of the taxes cuts little figure. King George III offered to strike from the stamp act all but the title. He only required that the colonists should recognize the principle that they were slaves and not free—that the king was the master and they were to serve.

"The advocates of this bill seem to be the King George of this century. Willing to accept any amount so that the principle may be saved; that may be established; that different taxation may obtain in one territory from that of another."

The measure was approved by the President, April 12, 1900.

March 2 the President sent to Congress this brief message:

"Since the evacuation of Porto Rico by the Spanish forces on the 18th day of October, 1898, the United States has collected on products coming from that island to the ports of the United States the duties fixed by the Dingley act and amounting to \$2,095,455.88, and will continue to collect under said law until Congress shall otherwise direct. Although I had the power, and having in mind the best interests of the people of the island used it to modify duties on goods and products entering into Porto Rico, I did not have the power to remit or modify duties on Porto Rican products coming into the ports of the United States. In view of the pressing necessity for immediate revenue in Porto Rico for conducting the government there and for the extension of public education, and in view also of the provisional legislation just inaugurated by the House of Representatives, and for the purpose of making the principle embodied in that legislation applicable to the immediate past as well as to the immediate future, I recommend that the above sum be collected and the sums hereafter collected under existing law shall, without waiting for the enactment of the general legislation now pending, be appropriated for the use and benefit of the island."

A bill was at once introduced in the House and

passed the same day. It was amended and passed the Senate, March 16, and after a conference of the two houses it was finally passed in this form:

"That the sum of \$2,095,455.88, being the amount of customs revenue received on importations by the United States from Porto Rico since the evacuation of Porto Rico by the Spanish forces on the 18th of October, 1898, to the 1st of January, 1900, together with any further customs revenue collected on importations from Porto Rico since the 1st of January, 1900, or that shall hereafter be collected under existing law, shall be placed at the disposal of the President, to be used for the government now existing and which may hereafter be established in Porto Rico, and for the aid and relief of the people thereof, and for public education, public works, and other governmental and public purposes therein until otherwise provided by law; and the revenues herein referred to, already collected and to be collected under existing law, are hereby appropriated for the purposes herein specified, out of any moneys in the Treasury not otherwise appropriated."

It was approved by the President, March 24, 1900.

The Nicaragua Canal.—Dec. 7, 1899, a bill was introduced in the House of Representatives "to provide for the construction of a canal connecting the waters of the Atlantic and the Pacific Oceans." It authorized the President to acquire from Costa Rica and Nicaragua control of territory necessary for the construction and defense of a ship canal from Greytown on the Caribbean Sea, by way of Lake Nicaragua, to Breto on the Pacific Ocean, and it appropriated the money needed to secure such control. It then authorized the President to direct the Secretary of War to construct the canal, make safe harbors at the terminal points, and erect fortifications for defense and for the safety and protection of the vessels using it. Among other details it was provided that the Secretary of War might have the work done by contract, and the limit of expenditure was set at \$140,000,000. The measure passed the House, May 2, 1900, by a vote of 224 yeas to 36 nays; not voting, 92.

It was reported in the Senate, but consideration of it was put over to the next session of the Congress, as the Senate had not taken action on the Hay-Pauncefote treaty. That treaty was made at Washington, Feb. 5, 1900, and it has been commonly regarded as a renewal of the policy of the Clayton-Bulwer treaty. It is as follows:

"The United States of America and her Majesty the Queen of the United Kingdom of Great Britain and Ireland, Empress of India, being desirous to facilitate the construction of a ship canal to connect the Atlantic and Pacific Oceans, and to that end remove any objection which may arise out of the convention of April 19, 1850, commonly called the Clayton-Bulwer treaty, to the construction of such canal under the auspices of the Government of the United States, without impairing the 'general principle' of neutralization established in Article VIII of that convention, have for that purpose appointed as their plenipotentiaries:

"The President of the United States, John Hay, Secretary of State of the United States, and her Majesty the Queen of Great Britain and Ireland, Empress of India; the Right Hon. Lord Pauncefote, G. C. B., G. C. M. G., her Majesty's ambassador extraordinary and plenipotentiary to the United States; who, having communicated to each other their full powers, which were found to be in due and proper form, have agreed upon the following articles:

"ARTICLE I. It is agreed that the canal may

be constructed under the auspices of the Government of the United States, either directly at its own cost, or by gift or loan of money to individuals or corporations, or through subscription to or purchase of stock or shares; and that, subject to the provisions of the present convention, the said Government shall have and enjoy all the rights incident to such construction, as well as the exclusive right of providing for the regulation and management of the canal.

"ART. II. The high contracting parties desiring to preserve and maintain the "general principle" of neutralization established in Article VIII of the Clayton-Bulwer convention, adopt, as the basis of such neutralization, the following rules, substantially as embodied in the convention between Great Britain and certain other powers, signed at Constantinople, Oct. 29, 1858, for the free navigation of the Suez Maritime Canal—that is to say:

"1. The canal shall be free and open, in time of war as in time of peace, to vessels of commerce and of war of all nations, on terms of entire equality, so that there shall be no discrimination against any nation or its citizens or subjects in respect of the conditions or charges of traffic or otherwise.

"2. The canal shall never be blockaded, nor shall any right of war be exercised nor any act of hostility be committed within it.

"3. Vessels of war of a belligerent shall not revictual nor take any stores in the canal except so far as may be strictly necessary, and the transit of such vessels through the canal shall be effected with the least possible delay, in accordance with the regulations in force, and with only such intermission as may result from the necessities of the service. Prizes shall be in all respects subject to the same rules as vessels of war of the belligerents.

"4. No belligerent shall embark or disembark troops, munitions of war, or warlike materials in the canal, except in case of accidental hindrance of the transit, and in such case the transit shall be resumed with all possible dispatch.

"5. The provisions of this article shall apply to waters adjacent to the canal, within 3 marine miles of either end. Vessels of war of a belligerent shall not remain in such waters longer than twenty-four hours at any one time except in case of distress, and in such case shall depart as soon as possible, but a vessel of war of one belligerent shall not depart within twenty-four hours from the departure of a vessel of war of the other belligerent.

"6. The plant, establishments, buildings, and all works necessary to the construction, maintenance, and operation of the canal shall be deemed to be part thereof, for the purposes of this convention, and in time of war, as in time of peace, shall enjoy complete immunity from attack or injury by belligerents and from acts calculated to impair their usefulness as part of the canal.

"7. No fortifications shall be erected commanding the canal or the waters adjacent. The United States, however, shall be at liberty to maintain such military police along the canal as may be necessary to protect it against lawlessness and disorder.

"ART. III. The high contracting parties will, immediately upon the exchange of the ratifications of this convention, bring it to the notice of the other powers and invite them to adhere to it.

"ART. IV. The present convention shall be ratified by the President of the United States, by and with the advice and consent of the Senate thereof, and by her Britannic Majesty; and the ratifications shall be exchanged at Washington or

at London within six months from the date hereof or earlier if possible.'

"In faith whereof the respective plenipotentiaries have signed this convention and thereunto affixed their seals."

The House bill was introduced before the negotiation of this treaty, but passed after its terms had been made known, and it was urged in the face of the policy which the treaty was designed to carry out. Mr. Hepburn, of Iowa, who was in charge of the measure, said in his speech, May 1,

"We are met by another class of gentlemen who say that while this route is practicable, while the canal is needed, while it should be an object of solicitude and fostering care and speedy completion by the Government, yet there are certain difficulties of a diplomatic nature that absolutely prevent us from doing anything.

"They say truthfully that in 1850 a treaty was negotiated between Great Britain and our country, popularly known as the Clayton-Bulwer treaty, and that one of its provisions declares that neither party alone, except in conjunction with the other, will secure this water route, or will attempt in any way to defend it without the consent of the other, and they say these provisions are a barrier, and until that is removed the Government of the United States can not in good faith undertake this work.

"I would not be an authority upon a grave question like this, but I want to call your attention to names of a long list of statesmen who have declared that that instrument—the Clayton-Bulwer treaty—is not now of operative force against us; that it either had been violated by Great Britain in such degree as to justify us no longer recognizing its potency, or that it had become obsolete because of the object stated in that treaty having been abandoned by both parties, or that both parties had themselves abandoned it by making no effort to carry out its provisions.

"In that list of statesmen that have taken one or the other of those positions all insist that almost or at the worst we had the right to declare it void and no longer binding. All of them have gone to that extent. I name Secretary Marcy and President Pierce, Secretary Cass, and every President from Pierce down to the present incumbent excepting Presidents Lincoln and Johnson, Douglas, Marcy, Frelinghuysen, Blaine, and others, all of them have united in saying that we stood to-day in the position, from the acts of other parties, that entitle us to declare that we would no longer be bound by its provisions.

"But, Mr. Chairman, if this is not true, I insist that we occupy that position now before the world that justifies us in caring for our own; in the pursuit of our own supreme interests, to say that that obligation undertaken fifty years ago will no longer bind us. I want to call attention to this fact that while writers upon the subject of international law tell us that in the letter of the law treaties, without there is a limitation as to time stated within them, or without they are carried out and completed, they are irrevocable and are to exist forever. That is the letter of the law but never its spirit.

"Look where you can in all the diplomacy of the world, and how many treaties do you find to-day which are fifty years old? All writers say that the right of a nation to determine a treaty is always dependent upon the circumstances and environment; that no general law or rule can be established, and that it becomes a question of morals rather than of law, a question of whether the circumstances are such as justify the nation

saying that it will no longer be bound by the long-time agreement made under other conditions, and made desirable by other surroundings or made for other generations of men.

"Look at this case in 1850, and what is the situation? We were then a weak nation of 23,000 people. Only two years before we had acquired our Pacific coast, or the California portion of it. We owned nothing beyond. There was Alaska for us; we had no coastwise trade.

Now our coastwise traffic is measured by millions of tonnage. Then 10,000 families would have been all that could be found in all that Pacific region. Now we have three great States. Then there was poverty there; now their wealth is enumerated by billions of dollars. Then there was no commerce except the trader in hides and furs; now the commerce of that coast reaches hundreds of millions of dollars annually. I say that the conditions have so changed, I say that our necessities have so changed, I say that our interests are so great as to demand that the people of this generation will not longer be bound by the barrier that was interposed by another generation half a century ago."

Noteworthy Election Cases.—Probably nothing connected with the session was of such sectional interest as the contest over the admission of Brigham H. Roberts as a Representative from Utah. The matter had been discussed throughout the country long before the Congress met, and public opinion was strongly against admitting him to the House—or at least strongly in favor of expelling him, as a polygamist, from membership. The main difference of opinion in Congress was as to the method of excluding him—whether he should be allowed a seat at all, or admitted and then expelled. The special committee appointed to consider his case reported two resolutions, Jan. 23, 1900. The majority resolution was in favor of refusal to admit:

"Resolved, That under the facts and circumstances of this case, Brigham H. Roberts, Representative-elect from the State of Utah, ought not to have or hold a seat in the House of Representatives, and that the seat to which he was elected hereby declared vacant."

The minority resolution was in favor of admission and subsequent expulsion:

"Resolved, That Brigham H. Roberts, having been duly elected a Representative in the Fifty-ninth Congress from the State of Utah, with the qualifications requisite for admission to the House of Representatives, is entitled, as a constitutional right, to take the oath of office prescribed for members; and, his status as a polygamist, unlawfully cohabiting with plural wives, affording constitutional ground for expulsion, but not for exclusion from the House."

"And if the House shall hold with us and swear Mr. Roberts as a member, we shall, as soon as recognition can be had, offer a resolution to expel him as a polygamist, unlawfully cohabiting with plural wives."

The contest of opinion on the course to be taken was very sharp, as a constitutional question was involved. In advocating exclusion, Mr. Taylor, of Ohio, who was in charge of the majority resolution, argued that Mr. Roberts was ineligible to membership, on the ground that Utah had been admitted into the Union with a condition against polygamy; that the Edmunds law denied not only the right of suffrage, but even the title to hold office, to a polygamist; and that, as the aimant was a notorious violator of the law of the land, the House might of its own inherent authority declare him ineligible. In answer to the

plea made in behalf of Roberts, that he come within the constitutional qualification—to wit, "No person shall be a Representative who shall not have attained the age of twenty-five years, and been seven years a citizen of the United States, and who shall not, when elected, be an inhabitant of that State in which he shall be chosen"—Mr. Taylor argued that the constitutional clause was not complete, and aimed only at stating certain grounds of ineligibility that required legal definition, whereas other and graver objections might be taken for granted as in their nature disqualifying. He stated the case in his opening speech as follows:

"The majority of the committee are fixed in their conviction that in view of the status of Brigham H. Roberts, not because of any moral question that may be involved, but because of the question of governmental right involved, in view of his defiant violation of law, in view of his denial of the validity and supremacy of the law of the land, has no right to take his seat in this body, and should be excluded therefrom.

"The minority, on the other hand, attaching more value to the husk than to the ear, seeming to conceive that the shadow is to be more taken care of than the substance, declare that we must let him go through the hollow form, the sacred form of taking an oath, and then expel him; to rob him of that which is substantial, but that we must not deprive him of that which is a mere shadow. They say, 'You may come up and enter our front door, in order that we may kick you out of the back door; but we cheerfully declare, with the Constitution before us, that we can not kick you down the front steps.'

"We believe that that is absolutely untenable as a proposition of law and absolutely unsupported by precedents.

"I want to make these preliminary statements respecting that. First, upon the doctrine of exclusion.

"The language of the constitutional provision, the history of its framing in the Constitutional Convention, and the context clearly show, whatever else may have been true, that it did not intend to prevent this disqualification for crime or for defiance of the Constitution and the laws. The overwhelming authority of text-book writers on the Constitution and of judicial declarations on the subject harmonizes with this view. The House of Representatives, in all the years of its existence, has never denied that it had the power and the right to exclude.

"In many instances it has excluded for disloyalty and for crime. In 1862 Congress passed the test oath act, which in effect disqualified hundreds of thousands of American citizens, and thousands of Representatives in this body went to the bar of the House under a disqualification that was not removed until they took the test oath, an oath substantial in its character and superadded to the constitutional oath. And this very House in 1869 adopted a general rule of order providing that no person should be sworn in as a member against whom the objection was made that he was not entitled to take the test oath.

"On the proposition of expulsion I present these general observations: That the ablest lawyers from the beginning of the Government down to this case, but of course not including it, have insisted that neither the House of Representatives nor the Senate has the right to expel a man unless the thing for which he was expelled occurred in connection with his election or while he was a member, and was inconsistent with his trust or duty as a member.

"I lay that proposition down as absolutely sound and as not contradicted anywhere; and both Houses of Congress have in many instances refused to expel members where the proof of guilt was absolutely clear, because the acts complained of were unrelated to the members as such, because the acts complained of were not inconsistent with the trust and duty of the member as such.

"Neither House has ever expelled a member for any other cause. So I say this here and now: To exclude is to be in harmony with principle and precedent; to expel is to do violence to principle and precedent. There is no precedent in the House against exclusion. There is no precedent in the American Congress for expulsion under such circumstances as exist here.

"Three reasons are asserted why this man should not be permitted to enter the House of Representatives:

"First, because of his violation of the Edmunds law and the disqualification created thereby.

"Second, independent of any statutory ineligibility, independent of any joint action of the two Houses in the passage of a law, but because of the inherent power of the House, by that inherent power which in all cases of exclusion has been invoked—and the House has never excluded for any other reason except for that which it itself declared, independent of any statute law—that this man was a defiant violator of law; his declarations, words, and acts that he was above the law, that the law did not speak to him, in the very necessity of things, made him ineligible; and

"Third, because the State of Utah was admitted into the Union under the express understanding that polygamous practices were at an end and would not be renewed. And now it sends as its Representative the most conspicuous example, the most conspicuous practitioner of the very thing the abandonment of which was the condition precedent to its admission into the Union."

Mr. Littlefield, of Maine, in charge of the minority resolution, while holding that the Edmunds act, made for a Territory, could not bind a State, and that a condition imposed on the admission of a Territory to statehood could not limit its equality of rights in the sisterhood of States, nevertheless made his main argument on constitutional grounds. He said:

"We believe that the House of Representatives is now sitting under the clause of the Constitution which makes it the judge of the election, the return, and the 'qualifications of' the gentleman from Utah. We believe that it is the duty of the House of Representatives to now sit as a judge, to determine what qualifications are required and whether or not the gentleman from Utah possesses those qualifications. We do not believe, when this House sits as this great constitutional court, that it sits here to legislate and create disqualifications. We believe it sits here to ascertain and determine, to ascertain what qualifications are prescribed by the Constitution, to determine whether or not the gentleman from Utah possesses these qualifications.

"The qualifications prescribed by the Constitution are age, citizenship, and inhabitancy.

"No person shall be a Representative who shall not have attained to the age of twenty-five years and been seven years a citizen of the United States, and who shall not, when elected, be an inhabitant of that State in which he shall be chosen."—(Constitution, Article I, section 2.)

"The report of the committee finds that the gentleman from Utah possesses these qualifications. Here the majority and the minority part company. The majority hold that this House

sitting here, alone, of its independent action, could add to the qualifications mentioned in the Constitution. The minority hold that they can not add to them. The minority hold that when the House sits as this great constitutional court it ascertains the qualifications required, and ascertains that the gentleman from Utah possesses these qualifications, that it is its duty under the Constitution to render a judgment in accordance therewith, no matter what the consequences may be, because we believe the Constitution to be 'the supreme law of the land.'

"I call attention to the several propositions relied upon by the majority, in order that we may understand at the outset the questions which divide us.

"The majority state, first, that they propose to exclude the gentleman from Utah—

"By reason of his violation of the Edmunds law."

"Second—and this is the main ground—

"By reason of his notorious and defiant violation of the law of the land, of the decisions of the Supreme Court, and of the proclamations of the Presidents, holding himself above the law and unamenable to it. No government could possibly exist in the face of such practices. He is in open war against the laws and institutions of the country whose Congress he seeks to enter."

"This proposition, stripped of its verbiage and rhetoric, simply means that this House of Representatives, here and now, can create and impose qualifications or disqualifications not mentioned in the Constitution, by its own independent, individual action.

"This is the proposition of which, as I understand, the majority are principally enamored."

"They say, on page 40 of their report:

"The principles underlying the second main ground of disqualification, hereinbefore asserted, have already been fully discussed, but the ground is appropriately restated at this point.

"We assert before the House, the country, and history that it is absolutely and impregnable sound, not to be effectively attacked, consonant with every legislative precedent, in harmony with the law and with the text-books on the subject."

"This is the first proposition to which I propose to address myself. It involves the construction of the Constitution and transcends in gravity and importance all other questions. Reflect for a moment. Let us see what the proposition is. The House by its own independent action can add disqualification or a qualification not mentioned in the Constitution.

"At this time it is proposed to add the disqualification of polygamy. At a future time it may be proposed to add the disqualification of adultery, of fornication. At another time it may be proposed to add the disqualification of membership in a trust or an octopus, or the attorney of a trust or an octopus, or any misdemeanor or obnoxious conduct, and so on *ad infinitum*.

"No man when he is elected to this House under this proposition, suggested by the majority, can ever tell whether he possesses the qualifications, or is affected by the disqualifications, that are thus to be asserted. It is only when he stands at the threshold of the House and knocks at the door, that he discovers that the House of Representatives, in the exercise of its wisdom, deems him obnoxious, then creates and declares the disqualification that may exclude him. No constituency can know whether its choice is eligible in fact, between the election and organizational popular excitement may demand the imposition of a disqualification, before unthought of, and the

ice, though qualified when elected, would be eligible when he presented himself for admission. And inasmuch as the action of this House does not conclude the action of another, the man who is admitted to-day may be excluded to-morrow.

Mr. Roberts agreed with neither the majority nor the minority resolution. His contention was that either exclusion or expulsion would be unconstitutional. He said:

"We may know from the history of the past that there is a power above that 'rules the harmonious destiny of this world even better than some ministers,' and that if nations indulge in constitutional immorality the result must be just that the indulgence in immorality with the individual is. Its end is death. And so I call your attention to the seriousness of departing from the constitution to respond to the clamor of misled people. What is it that is invoked as an excuse for this proposed action?"

What mighty emergency has arisen that demands this disregard of constitutional limitations? What vital force or principle of our Government is threatened? Who is in arms against the institutions, that you should resort to methods that never were resorted to except in the darkest of civil war and when the life of the nation is at stake? It is alleged that a man guilty of being married under the sanction of his church plurality of wives has been elected to the House of Representatives, and hence that the American people are in danger and these extraordinary proceedings must be invoked against it. His crime and the circumstances under which it was committed is supposed to make his a more direful offense than murder or robbery, and hence you must be rid of him. The report says:

"The case of a bribe taker or of a burglar or of a murderer is trivial, is a mere ripple on the surface of things, compared with this far-reaching, deep-rooted, audacious lawlessness."

It seems to me that that is rather strange language to be employed in a sober presentation of facts before the House of Representatives and that uses too much of rhetoric and passion. Just a few moments I want to pay attention to the nature of this crime of polygamy, not with a view to showing that the American people have not the right to establish monogamy as a system of marriage that shall prevail, and not for the purpose of defending polygamy either. In the early stage that took place with reference to this case the floor of the House I then said that I was here to represent polygamy, that I was not here to defend it; that we had long ago passed that stage of the case; that the thing itself was out of the realm of discussion. So I do not have my remarks to be construed as any defense of the doctrine of polygamy; but I do want to draw attention to the nature of this crime, in order that we may ascertain whether it is as awful as the description of it in the committee's report, and if it warrants a more lawless act than polygamy itself in order to rebuke a man supposed to be guilty of it who has been elected to the House of Representatives.

The Jewish people were made the depository of God's revelation to humanity. You will not find the crime of polygamy referred to regarded among the people as of the character that it is described in the report of the committee. Evidently it is not from its nature a sin or a crime. If it were, we would not find the Jewish law enforcing it under some circumstances, regulating it under other circumstances, and men after God's own order sustaining those relations which are now

supposed to justify you in closing the doors against the member from Utah. If you go to the teachings of the great Master, whom, I take it, we all revere, although he denounced every crime, every sin that man can commit, you shall find no word of his in condemnation of the conduct of the patriarchs or of the law relating to this matter as it was given by Moses to ancient Israel.

"Last evening, while walking in the resident portion of this city, I passed a magnificent, heroic statue of stern old Martin Luther, than whom the nations of western Europe and America owe no man more than they do to him for the religious and civil liberty that they now possess, the founder of Protestant Christendom; and that man upon this subject that is here so much denounced declared in the early days of Protestant Christendom, when he was informed that his disciple Carlstadt was teaching polygamy, said in his letter to Chancellor Brueckes:

"I indeed must confess that I can not protest when one takes many wives, for it does not contradict the Scriptures."

"And again, in his letter to Philip, the Landgrave of Hesse, remarking upon the fact that Philip had taken a second wife, his first wife being still living, he said:

"In matters of matrimony the laws of Moses are not revoked or contradicted by the gospels."

"Yet we build monuments to Luther, notwithstanding his toleration and defense of that form of marriage. Now, I say all these things not for the purpose of arguing here upon the rightfulness of polygamy, but I do say what I have here remarked for the purpose of fixing it in the minds of members that it is merely a crime because prohibited by law, and not by its nature a crime."

He maintained that the question of polygamy had been settled under the law in Utah, and that the Constitution of the State, as adopted, had fulfilled the condition which required the abolition of plural marriage before admission to the Union. He declared that he accepted that settlement, though he had been taught that polygamy was a sacred institution, and though he held himself bound by every principle of honor and humanity to the women he had already married. He asserted that he was chosen to represent all classes in Utah:

"And I stand here to-day elected by the gentle votes of Utah, rather than by the Mormon votes, and that, too, as reported here by your committee, after they knew all about Roberts in Utah. Yes, and knowing him, and knowing the conditions that had prevailed in Utah, I take it that they were better judges of the man they would have represented them here upon the floor of this House than you gentlemen can be, who do not know Roberts and who do not know the conditions that have prevailed in Utah."

"They knew Roberts. Yes; perhaps many of them knew of his struggles from boyhood; knew how he came of an obscure family, without prestige, without property, himself bareheaded and barefooted when he came into the State; of his boyhood home that never consisted of more than two small log rooms. They knew how, late in his boyhood, he made every effort at acquiring something of book knowledge. They knew of him in mining camps and by the flaming forge, where upon the anvil he earned by the sweat of his brow the bread that he ate, and all the while making efforts in the midst of untoward circumstances to acquire an education. They knew how he persisted in his efforts until his anvil was left behind and he found his way into the forum of the people, becoming the editor of newspapers and of magazines.

"They knew him as an advocate of his religious faith and the defender of his political principles, until every platform in the State rang with his voice in the maintenance of what he believed to be the right. You knew him, also, as a member of the constitutional convention which helped settle this vexed question of polygamy upon the basis of its settlement under that Constitution.

"What do you propose in the rejection of the member from Utah? Why, you propose to teach the inhabitants of the State of Utah a lesson! You propose to discipline them. You propose to summon them before the bar of this House and administer a rebuke.

"These people, however, to whom you have proposed to administer this reproof are worthy of better treatment. They are the pioneers pre-eminent of the western half of the United States; they have redeemed a desert and given a State to civilization."

Mr. Roberts closed with the charge that religious animosity was responsible for the attempt to exclude him from Congress:

"At whose behest are you called upon to administer this rebuke? What is the source of it? Why, three sectarian preachers from the State of Utah made a formal protest before the last Congress, and, I understand, before this House, against the admission of the member from Utah, and then took it upon themselves to run throughout the land and stir up religious prejudice against the Mormons, until a wonderful petition is rolled in on the floor of this House that makes members quake and tremble with fear in its presence—a petition gathered from Sabbath schools, sectarian churches, and societies. Much has been said about interference between Church and state.

"Suppose that the Mormon Church undertook to defeat the will of the people of a sovereign State, or that the Catholic Church undertook to do the same thing? There would be such warnings uttered, there would be such protests pronounced, against such interference of the Church with the state in a purely political matter that we would be made to believe that the very foundation of the Government was in danger. But here, without protest, you permit the Church to interfere with the state when the case of a Mormon is involved. I do not, however, refer to the worthiness of my people and the unworthiness of the assault that is made upon them for the purpose of influencing your action in the matter now pending before you. As I said in the commencement of this discussion, when last speaking upon the floor of this House, I am not here begging the question; I am not here asking for favors; I am not here on my own behalf, but on behalf of my people, to demand for myself and for them our constitutional rights. Clear your vision; look to the charter that should guide your action; find warrant in it for your proposed action of exclusion or expulsion if you can; and if you find it, I will walk out without complaint. You can not find it without adding qualifications for membership in this House not enumerated in the Constitution, and that you have no right to do.

"If you can not find warrant in the Constitution for either of the proposed methods of unseating the member from Utah, then it becomes your duty under the oath that you have taken and in order to be law-abiding people yourselves, to show respect for the highest law of the land, to say that the protecting ægis of the Constitution overshadows this man, and you can neither exclude him nor expel him without doing such violence to the Constitution as would menace representative government.

"Some of the papers in discussing the Roberts

case have said, 'Brand this man with shame and send him back to his people.' Mr. Speaker, I thank God that the power to brand me with shame is something quite beyond the power of this House, great as that power is. The power to brand with shame rests with each man and nowhere else. The Almighty God has conferred it upon no one else. I have lived up to this day in all good conscience in harmony with the moral teachings of the community in which I was reared and am sensible of no act of shame in my life. Brand me with shame! Why, if you finally determine either to exclude or expel me, I shall leave this august chamber with head erect and brow undaunted and walk God's earth as the angels walk the clouds, with no sense of shame upon me. And, if in response to the sectarian clamor that has been invoked against the member from Utah, you violate the Constitution of your country, either in excluding or expelling me, all the shame that there is in this case will be left behind me and rest with this House."

The resolutions, majority and minority, came to vote Jan. 25, 1900. The minority resolution, declaring Mr. Roberts eligible to admission but open to expulsion on constitutional grounds, was rejected by a vote of 81 yeas to 244 nays; not voting, 29. The majority resolution, refusing admission, was adopted by a vote of 268 yeas to 50 nays; not voting, 36. A majority of two thirds would have been required to expel Mr. Roberts had he been admitted to membership, but the divisions on these resolutions show that such a vote would have been given in case of the adoption of the minority resolution.

The case of Matthew S. Quay, who claimed to be a Senator from Pennsylvania by the appointment of the Governor of the State, involved an old issue of constitutional interpretation: but it commanded unusual interest because of the political opposition to Mr. Quay, who had been made the object of bitter attack by influential members of his own party. He had been appointed after the adjournment of the Pennsylvania Legislature, but the senatorship fell vacant during the legislative session; and so the point to be considered was whether the Governor had power to appoint when the Legislature had refused to elect. The Constitution gives the Governor power to appoint only when a vacancy occurs during a recess of the Legislature, and the Senate has decided in a succession of cases that no appointment is valid when made after a Legislature adjourns without electing. It was natural, therefore, to expect that Mr. Quay would not be admitted to the Senate, as the precedents were strongly against him; but certain circumstances not dwelt upon in the discussion gave him unusual sympathy. He had been personally popular in the Senate; he was a leader of his party in a great State; he had been fiercely attacked and accused of political rascalities and even crimes; and an indictment against him for conspiracy to defraud had been brought to trial during the legislative session, in which the prosecution went to pieces. Without touching on this point, Senator Penrose, of Pennsylvania, in his preliminary statement of facts, suggested the peculiar party conditions that prevailed. He said:

"The full term of the Hon. Matthew Stanley Quay, senior United States Senator from Pennsylvania, expired on the 3d day of March, 1899, while the Legislature was still in session. By the provisions of Article II, section 4, of the Constitution of Pennsylvania the General Assembly shall meet at 12 o'clock on the first Tuesday of January every second year, and accordingly the Legislature met upon the first Tuesday of January, 1899. At

beginning of the session, in order to expedite legislative business and to economize in the expenditure of public funds, a concurrent resolution was offered in the Senate fixing the time for the adjournment on the 20th day of April following. This resolution unanimously passed both Houses. It then became a standing rule of the Legislature, and, under our parliamentary practice, could not be changed except by a two-thirds vote. Pursuant to a published call, signed by the chairman of the Republican caucuses of the Senate and the House of Representatives, respectively, the one having been issued at the customary time and place and by the officials and in the manner prescribed by the party regulations, a joint caucus of the Republican members of the Senate and House of Representatives was held Jan. 3, 1899, for the purpose of nominating a person to be voted for as a Republican candidate for the office of United States Senator.

At this caucus several candidates were voted for, but Senator Quay, having received 98 out of 109 Republican votes present, was unanimously declared the caucus nominee of the Republican party. Under the act of Assembly of Jan. 11, 1867, affirming the similar act of Congress of July 25, 1866, regulating the election of United States Senators, the Legislature proceeded to ballot on the third Tuesday of January, 1899. Upon the following day the members of the two houses convened in joint Assembly, and it appearing upon the reading of the journal of each house that the same person had not received a majority of the votes in each house, as required by the act of Assembly aforesaid, the joint Assembly then proceeded to propose a person for the office of United States Senator, and continued to ballot each succeeding day until the Legislature adjourned on the 20th day of April, as required by the resolution aforesaid. Inasmuch as none of the candidates received a majority of the votes cast, no election resulted. At the first ballot taken in the joint Assembly, Quay, Republican, received 112 votes; Jenks, Democrat, 82; leaving scattering and absent, 60.

On account of members and Senators absent and not sworn in, it required 126 votes to make a majority necessary to elect. In this manner balloting proceeded day after day until the close of the session, Quay receiving the support of the regular Republicans, Jenks of all the Democrats, and the other Senators and members dividing their strength among the various candidates. Twenty-nine ballots had been taken when the Legislature adjourned without day on the date above mentioned. On the 21st day of April, 1899, the Legislature having adjourned and a vacancy in the office of United States Senator existing by reason of the failure of the Legislature to elect, the Governor, believing that the State was entitled to a representation in the Senate under the provisions of section 2 of Article II of the Federal Constitution, appointed Mr. Quay to fill the vacancy until the next meeting of the Legislature." The debate was long and learned, and the decision of the case singularly close. The Senate committee to which Mr. Quay's credentials had been referred reported a resolution that he was entitled to take his seat as a Senator, and, on April 24, 1900, a motion to amend by striking out of the resolution was lost by a vote of 32 yeas to 33 nays; not voting, 22. The resolution refusing to admit him was then passed by a vote of 33 yeas to 32 nays; not voting, 22. The Senate preserved its consistency by a majority of 1. Another sensational case was that of William Clark, who had been elected a Senator from Montana. Charges of bribery and corruption were

brought against him, and the Senate ordered an investigation. The report of the committee was against him, and a resolution was submitted declaring that he was not duly and legally elected to a seat in the Senate of the United States. May 15, 1900, Mr. Clark rose in the Senate to a question of personal privilege, and, after a statement in his own defense, submitted a letter of resignation, sent to the Governor of Montana. The resolution in his case was then passed over. In the meanwhile, during the absence of the Governor of Montana in California, the Lieutenant Governor appointed Mr. Clark to fill the vacancy caused by his own resignation; and the Governor, on his return, appointed Mr. Maginnis.

Miscellaneous.—The most elaborate piece of legislation perfected during the session was "an act making further provision for a civil government for Alaska, and other purposes." It covers 231 pages of the volume of statutes.

Of more political importance was the act "to provide a government for the Territory of Hawaii," though, in the nature of the case, it dealt far less with mere details. It established the new Territory and created a Territorial government.

The measure for a civil government in the Philippine Islands, introduced in the Senate, was not acted upon.

An important pension measure was approved May 9, 1900. It is an amendment to the act of June 27, 1890, and provides for the aggregation of disabilities in granting pensions for incapacity to earn a living, and also fixes the basis and the limit of a widow's claim. It is as follows:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That sections 2 and 3 of an act entitled "an act granting pensions to soldiers and sailors who are incapacitated for the performance of manual labor, and providing for pensions to widows, minor children, and dependent parents," be and the same are hereby amended so as to read as follows:

"SEC. 2. That all persons who served ninety days or more in the military or naval service of the United States during the late war of the rebellion and who have been honorably discharged therefrom, and who are now or who may hereafter be suffering from any mental or physical disability or disabilities of a permanent character, not the result of their own vicious habits, which so incapacitates them from the performance of manual labor as to render them unable to earn a support, shall, upon making due proof of the fact, according to such rules and regulations as the Secretary of the Interior may provide, be placed upon the list of invalid pensioners of the United States, and be entitled to receive a pension not exceeding \$12 per month and not less than \$6 per month, proportioned to the degree of inability to earn a support; and in determining such inability each and every infirmity shall be duly considered, and the aggregate of the disabilities shown be rated, and such pension shall commence from the date of the filing of the application in the Bureau of Pensions, after the passage of this act, upon proof that the disability or disabilities then existed, and shall continue during the existence of the same: *Provided,* That persons who are now receiving pensions under existing laws, or whose claims are pending in the Bureau of Pensions, may, by application to the Commissioner of Pensions, in such form as he may prescribe, showing themselves entitled thereto, receive the benefits of this act; and nothing herein contained shall be so construed as to prevent any pensioner thereunder from prosecuting his claim and receiving his pension under any other general

or special act: *Provided, however*, That no person shall receive more than one pension for the same period: *And provided further*, That rank in the service shall not be considered in applications filed under this act.

"Sec. 3. That if any officer or enlisted man who served ninety days or more in the army or navy of the United States during the late war of the rebellion, and who was honorably discharged has died, or shall hereafter die, leaving a widow without means of support other than her daily labor, and an actual net income not exceeding \$250 per year, or minor children under the age of sixteen years, such widow shall, upon due proof of her husband's death, without proving his death to be the result of his army service, be placed on the pension roll from the date of the application therefor under this act, at the rate of \$8 per month during her widowhood, and shall also be paid \$2 per month for each child of such officer or enlisted man under sixteen years of age; and in case of the death or remarriage of the widow, leaving a child or children of such officer or enlisted man under the age of sixteen years, such pension shall be paid such child or children until the age of sixteen: *Provided*, That in case a minor child is insane, idiotic, or otherwise physically or mentally helpless, the pension shall continue during the life of said child, or during the period of such disability; and this proviso shall apply to all pensions heretofore granted or hereafter to be granted under this or any former statute; and such pensions shall commence from the date of application therefor after the passage of this act: *And provided further*, That said widow shall have married said soldier prior to the passage of the said act of June 27, 1890."

Another general act of interest was that providing "for free homesteads for actual and *bona fide* settlers, and reserving the public lands for that purpose," approved May 17, 1900. The text of it is as follows:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all settlers under the homestead laws of the United States upon the agricultural public lands, which have already been opened to settlement, acquired prior to the passage of this act by treaty or agreement from the various Indian tribes, who have resided or shall hereafter reside upon the tract entered in good faith for the period required by existing law, shall be entitled to a patent for the land so entered upon the payment to the local land officers of the usual and customary fees, and no other or further charge of any kind whatsoever shall be required from such settler to entitle him to a patent for the land covered by his entry: *Provided*, That the right to commute any such entry and pay for said lands in the option of any such settler and in the time and at the prices now fixed by existing laws shall remain in full force and effect: *Provided, however*, That all sums of money so released which if not released would belong to any Indian tribe shall be paid to such Indian tribe by the United States, and that in the event that the proceeds of the annual sales of the public lands shall not be sufficient to meet the payments heretofore provided for agricultural colleges and experimental stations by an act of Congress, approved Aug. 30, 1890, for the more complete endowment and support of the colleges for the benefit of agriculture and mechanic arts, established under the provisions of an act of Congress, approved July 2, 1862, such deficiency shall be paid by the United States: *And provided further*, That no lands shall be herein included on which the United States Government had made

valuable improvements, or lands that have been sold at public auction by said Government.

"Sec. 2. That all acts or parts of acts inconsistent with the provisions of this act are hereby repealed."

The Senate passed a bill for the reorganization of the army, on which the House failed to act, and the House passed a bill for the restriction of trusts, which the Senate failed to reach.

Bills, in moderate number, for public buildings, bridges, and right of way, were passed.

The Appropriations.—The appropriations made by the Congress at its first session, for fiscal year 1900–1901, were as follows: Agriculture, \$4,023,500; army, \$114,220,096; diplomatic, \$771,169; District of Columbia, \$7,576,869; fortifications, \$7,383,628; Indian, \$8,198,089; legislation, \$24,176,532; Military Academy, \$653,590; naval, \$85,080,917; pension, \$145,245,230; post office, \$113,648,239; river and harbor, \$561,000; sundries, \$65,298,886; deficiencies, \$15,679,512; miscellaneous, \$3,500,000; total regular, \$577,017,200; permanent, \$132,712,220; grand total, \$709,729,420.

CONNECTICUT, a New England State, one of the original thirteen, ratified the Constitution Jan. 9, 1788; area, 4,900 square miles. The population, according to each decennial census, was 237,946 in 1790; 251,002 in 1800; 261,942 in 1810; 275,148 in 1820; 297,675 in 1830; 309,978 in 1840; 370,792 in 1850; 460,147 in 1860; 537,454 in 1870; 622,700 in 1880; 746,258 in 1890; and 908,355 in 1900. Capital, Hartford.

Government.—The following were the State officers in 1899: Governor, George E. Lounsberry; Lieutenant Governor, Lyman A. Mills; Secretary of State, Huber Clark; Treasurer, Charles S. Mesick; Comptroller, Thompson S. Grant; Attorney General, Charles Phelps; Adjutant General, L. N. Van Keuren; Insurance Commissioner, Edw. L. Scofield—all Republicans; Factory Inspector, George L. McLean; Building and Loan Commissioner, George F. Kendall, succeeded in March, 1900, by Edward E. Fuller; Dairy Commissioner, John Noble; Commissioner on Domestic Animals, Hiram O. Averill; State Auditors, Walter A. Ryan and D. Ward Northrop; Board of Arbitration, George A. Parsons, Franklin T. Ives, Gilbert Smith; Railroad Commissioners, O. R. Felt, Washington F. Willcox; Highway Commissioner, James H. MacDonald; Bank Commissioner, Charles H. Noble, Sidney W. Crofut, resigned Aug. 31, succeeded by George F. Kendall; Chief Justice of the Supreme Court of Errors, Charles B. Andrews, Republican; Associate Justices, David Ward and Frederic B. Hall, Republicans; Simeon E. Baldwin and William Hamersley, Democrats; Clerk, George A. Conant.

Population.—The census returns give the population by counties as follow:

COUNTIES.	1900.	Increase since 1890.
Hartford.....	195,415	4,850
New Haven.....	260,163	6,758
New London.....	82,758	184,508
Fairfield.....	184,508	46,861
Windham.....	46,861	63,673
Litchfield.....	63,673	41,790
Middlesex.....	41,790	24,533
Tolland.....	24,533	(decrease 1,000)
Total	908,355	

The population of Hartford is 79,850: in 1890 it was 53,230; taken with the cities and towns connected with it by the trolley system—viz., Britain, Manchester, Bristol, Vernon, East Hartford, Glastonbury, Windsor, Farmington, Berlin, West Hartford, Wethersfield, South Windsor,

Plainville, and Newington—the total is about 170,000, against 120,000 in 1890. The larger towns and their populations are: New Haven, 108,827; Hartford, 79,850; Bridgeport, 70,996; Waterbury, 51,139; Meriden, 28,699; New Britain, 28,202; Norwich, 24,637; Norwalk, 19,932; Danbury, 19,474; Stamford, 18,830; New London, 17,548; Middletown, 17,486; Ansonia, 12,681; Torrington, 12,453; Greenwich, 12,172; Manchester, 10,601; Naugatuck, 10,541; Windham, 10,137; Bristol, 9,643; Wallingford, 9,001; Stonington, 8,540; Vernon, 8,483; Derby, 7,930; Winchester, 7,763; Putnam, 7,348; Orange, 6,995; Killingly, 6,835; Enfield, 6,699; Thompson, 6,442; East Hartford, 6,406; Groton, 5,962; Branford, 5,706; Huntington, 5,572. Of the 39 incorporated cities and boroughs, only 6 have fewer than 2,000 inhabitants in 1900.

Finances.—The Treasurer's statement, showing the condition of the treasury Sept. 30, is as follows: The receipts increased from \$2,749,273.20 in 1899, to \$2,876,856.83, a gain of \$127,583.63. The principal items of increase were: Military commutation tax, from \$150,598 to \$154,711; mutual life insurance companies, from \$283,817 to \$291,066; steam railroads, from \$965,502 to \$975,143; street railroads, from \$138,502 to \$157,450; savings banks, from \$392,782 to \$418,780; avails of courts, from \$31,418 to \$54,223; insurance department, from \$77,946 to \$87,114; and succession tax, from \$115,195 to \$165,930.

The expenditures were \$2,528,514.13, a decrease of \$1,766.20. The receipts for the year exceeded the expenses by \$384,342.70, and as there is included in the expenditures \$100,000 paid for the redemption of State bonds, the treasury, as compared with its condition a year ago, is \$448,000 better off.

The balance in the treasury to the credit of the civil list funds was \$682,884.

The funded debt less the civil list fund in the treasury is now \$2,108,873.29, as compared with \$2,557,215.99 a year ago.

The State has claims against the United States Government growing out of the Spanish war, now in process of collection. These claims will be about \$150,000. The State also has unsettled claims on account of the civil war.

The principal items of expenditure were: Expenses of the General Assembly, \$148,355.08; common schools, \$440,415.93; judicial expenses, \$339,424.55; humane institutions, \$314,943.58; National Guard, \$215,330.32; normal schools, \$68,747.97; board of prisoners in county jails, \$112,682.62; salaries and expenses in executive offices, \$38,417.23; State Capitol and grounds, \$45,294.16; State Board of Education, \$28,865.88; State Prison, \$64,917.30; School for Boys, \$68,195.10; School for Girls, \$42,240.82; sick and wounded soldiers, \$75,246; agricultural affairs, \$48,767.14; printing and circulating documents, \$43,973.92; Highway Commissioner, \$117,973.56; Insurance Commissioner, \$32,459.31; interest on State bonds, \$104,700.

Education.—The annual report of the State Board of Education, submitted in July, contains in its opening pages a review of the work of education in Connecticut for the past twenty-five years, from 1875 to 1899. The report says: "The total expenditure from all sources on public education in Connecticut, including maintenance of normal schools during the period under review, is \$52,145,677.78; or, if we leave out of account the indebtedness at the end of the period, the amount is \$48,965,217.83. In the twenty-five years ending Sept. 1, 1899, \$5,789,064.72 had been paid for completion or enlargement of schoolhouses. The value of all school property, including buildings and

sites, increased from \$4,284,401.35 in 1884 to \$10,192,747.35 in 1899. The value of school property per capita of the population is \$11.62. The number of pupils on the enumeration lists increased from 134,976 to 189,717; the number on the registers increased from 119,489 to 151,325, and the number in average attendance increased from 68,593 to 109,951. The number of public kindergartens has increased from 5 in 1890 to 77 in 1900, and the number of children from 628 to 6,895.

"An increasing interest in the providing of school libraries is attested by the fact that the number has increased from 240 in 1884 to 771 in 1898-'99. The number of books is reported to be 158,073, compared with 28,035 in 1885. Since 1875 the State has contributed to these libraries \$113,105, and districts and individuals have added \$244,060.99. The total expenditure for libraries has been \$357,165.99.

"The number of teachers has increased from 2,613 to 4,085. There has been a great increase in the number of women, compared with the number of men, engaged as teachers. The average monthly salary of men rose from \$70.05 in 1875 to \$89.87 in 1899, and that of women from \$37.35 to \$43.61."

By the enumeration this year, the children of school age were 194,817, a gain in one year of 5,100. The cost for each was \$24.20.

The State Normal School at New Britain celebrated its fiftieth anniversary June 21. It was the sixth in date of establishment in the United States. New Britain, then a parish of Berlin, appropriated \$16,250 for a building, and the school opened with 67 pupils for its first term. Only one of its first graduating class of 5 in 1851 is now living. The graduates number about 1,720. Of these about 1,500 are living, about 700 being engaged in educational work. The number of scholars registered in 1899 was 250 and the number in attendance in June, 1900, was 225.

There were 18 graduates from the Agricultural College in June, 10 of whom were women. The whole number previously graduated since the opening is 166, of whom only 12 were women.

The enrollment of undergraduates at Wesleyan University in October was 332. The alumni considered majority and minority reports, and submitted one to the trustees in the summer in regard to woman students. The trustees referred the first minority report, after one change, to a special committee, to be reported upon in six months. This declared Wesleyan to be a man's college, but as women had been admitted it agreed that the college should continue open to them to the extent of admitting 15 girls to each 100 young men, and that these chosen few should have privileges in all respects equivalent to those accorded to men. The majority and the first minority reports, however, agreed in many provisions for keeping the work of the man and woman students separate, including careful provision against their competing in public. The only change made in the



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report by the trustees was to increase the percentage of woman students from 15 to 20.

The one hundred and ninety-ninth commencement of Yale University took place June 27. The number of graduates in each department was: Academic, 324; scientific, 132; medical, 28; law, 52; music, 12; candidates for doctorate, 36. The president's address reported changes in the courses of study, notably an increase of elective work. The entire work of the senior year is now elective. The study which has most generally grown in favor is English. At the Sheffield Scientific School an independent course in sanitary engineering has been established, and a special course preliminary to the study of forestry. The Peabody Museum has received from London a collection of Egyptian antiquities presented by the Connecticut members of the American Archaeological Association. The treasurer's report to the corporation in November showed that for the fiscal year ending July 31, 1900, the permanent funds of the university have been increased by \$427,336.59. Salaries to professors, instructors, and others for tuition amounted to \$361,395.15; salaries and wages other than for tuition were in amount \$114,742.82. Assistance paid to students amounted to \$58,411.82.

The enrollment at Hartford Theological Seminary in September was as follows: Senior class, 22; middle class, 22; junior class, 18; special mission class, 3; post-graduates, 3; fellows, 3; candidates for degree of Ph. D., 1; special, 1; total, 73.

Corrections.—The report of the State Prison for the year ending Sept. 30, 1899, showed 503 inmates. The average for the year was 507.38. Of the \$95,000 appropriation granted the institution by the Legislature of 1897, there remained an unexpended balance in the State treasury of \$10,585.45. The average number of officers and employees is 53. The total earnings from all sources for the year ending at this date were \$48,088.63.

Insurance.—The premium receipts increased in 1899 over 1898 as follow: Connecticut companies, \$1,365,430.73; companies of other States, \$19,420,051.28; industrial companies, \$6,802,517.99; a total increase in 1899 of \$27,588,000. Receipts of interest on mortgages and collateral loans of Connecticut companies decreased in 1899 \$433,203.45, while companies of other States increased \$392,952.66, and industrial companies received \$201,648.86 more than in 1898. Receipts of interest and dividends on bonds and stocks increased in 1899 over 1898 \$2,632,051.44. Income exceeded disbursements in 1899 \$110,937,969.64, an increase over 1898 of \$13,283,946.64. The Connecticut companies reduced their loans on bond and mortgage during 1899 \$1,823,611.44, while companies of other States increased their loans on the same security \$9,679,362.50, and the industrial companies \$3,435,890.65.

Banks.—The number of institutions in the State under the supervision of the Bank Commissioners is 117. These include the savings banks, the State banks, and the trust companies. The amount of deposits in the Connecticut savings banks Jan. 1, 1900, was \$176,275,463.60. There was an increase of \$10,228,336.75 in deposits in 1899. The assets of the banks at the beginning of the year were in round numbers \$185,000,000.

Railroads.—The length of main line and branches in the State is 1,013.35 miles, an increase of 5.10 miles, and a total, including sidings, etc., of 1,819.21 miles. The property accounts of all the companies amount to \$174,688,387.44, a decrease of \$1,040,481.79. The funded debt per mile of road is \$26,801.09. The current liabilities of the companies show a net increase of \$2,299,138.48, and now amount to \$8,002,023.36, being \$5,471.13 per mile of road. The gross earnings of the com-

panies were \$38,663,732.27, an increase of \$1,169,987.17. The operating expenses of the year were \$26,069,115.65, an increase of \$403,331.04.

The total length of street railways is 26,351 miles. The total amount of capital stock authorized is \$23,328,000, and the amount issued is \$12,715,948, an increase of \$2,264,908 during the year. The net earnings for the year were \$1,121,508.59. The total number of passengers carried was 59,084,702. The number of passengers carried by the steam railroads during this same period was 50,269,468.

Labor.—The thirteenth annual report of the Factory Inspector, covering the year ending Sept. 30, 1899, says that 1,466 factories, employing 151,152 persons, and 214 bakeshops were visited by agents of the department, besides many places where the manufacture of clothing, cigars, and artificial flowers is carried on, the inspection of which was added to the duties of this department by the General Assembly of 1899. At that session a law was passed regulating the manufacture of coats, vests, trousers, knee pants, overalls, skirts, shirts, ladies' waists, artificial flowers, purses, cigars, cigarettes, or any articles of wearing apparel intended for sale. This law was intended to regulate manufacturing of such goods in tenements. It was said that the sweatshops located in New York city were being moved into Connecticut and practicing the same system of sweating as was carried on in New York city. Careful inquiry failed to substantiate these statements. The law of 1897 requiring bakeshops to be properly drained, plumbed, lighted, and ventilated, and kept in sanitary condition, with proper regard to the health of operatives and the production of wholesome food, has had the effect of bringing many former cellar bakeshops above ground. No new ones are allowed to start in underground rooms.

Building and Loan Associations.—At the date of the last report, for the year closing Sept. 30, 1899, there were 15 associations, all of the State, the foreign associations having withdrawn. There were 7 mortgage investment companies, all but 2 of which are closing up their business. One went out of business in the year. The total assets of the 15 associations for the year ending Sept. 30, 1899, are \$3,774,526.40, which shows an increase over Sept. 30, 1898, of \$245,452.11. The liabilities in installments paid and earnings credited of domestic associations show an increase of \$187,611.05, and a decrease of liability on single payment shares of \$83,478.32. Estimates from returns received indicate that 2,000 homes have been built with the assistance of the associations since their organization.

Historical.—Anniversaries of some of the old towns of the State were celebrated this year. Middletown is two hundred and fifty years old. The date of its settlement is given as 1650, although a gravestone in the cemetery is marked 1648. It was first called Mattabeseck, but in 1853 the name was changed to Middletown.

East Haddam celebrated its bi-centennial June 6, and also the birthday of Nathan Hale, who was born June 6, 1755. After his graduation at Yale he taught in East Haddam in a little schoolhouse, which was presented on this anniversary to the Connecticut Society, Sons of the Revolution, by the Sons of the Revolution of New York. It was purchased by Richard H. Greene and moved to a plot of ground on a bluff overlooking the town and the Connecticut river. Ex-Gov. Bulkeley bought some of the surrounding land, the whole to be known as Nathan Hale Memorial Park.

The Sons of the Revolution of New York State have since relieved Mr. Greene of his personal responsibility in the matter.

On Nov. 12 Bridgeport commemorated the one hundredth anniversary of its creation as a borough with a parade of 20,000 men, a display of fireworks, and a banquet.

Nov. 22, Trinity Parish (Episcopal), of Southport, town of Fairfield, observed the one hundred and seventy-fifth anniversary of the dedication of its first house of worship and the one hundred and ninety-ninth of the founding, in London, England, "the Venerable Society for the Propagation of the Gospel in Foreign Parts," to which the parish is largely indebted in the first half century of its existence.

Camp Field and a soldiers' monument built upon it were presented to the city of Hartford, and dedicated Oct. 4. The field, which was given by John C. Barker, is the site of the encampment of regiments that were enlisted for the civil war. Of these men, 394 were killed in action, 230 died of wounds, and 834 died of disease. The monument is a statue of Gen. Griffin A. Stedman.

Political.—At the town elections, Oct. 1, 125 elect Republican and 37 Democratic, the same as in 1899, though the lists were not wholly identical. One more town voted for no license—90 in 1900 against 89 in 1899; 78 were for license.

The State Republican Convention was held Sept. 26, at New Haven. Following were the candidates: For Governor, George P. McLean; Lieutenant Governor, Edwin O. Keeler; Secretary of State, Charles G. R. Vinal; Treasurer, Henry H. Hallup; Comptroller, Abiram Chamberlain.

The candidates chosen at the Democratic convention at Hartford, Sept. 20-21, were: For Governor, Samuel L. Bronson; Lieutenant Governor, Cyrus G. Beckwith; Secretary, James P. Woodruff; Treasurer, Edwin C. Pinney; Comptroller, William L. Hunting.

The Prohibitionists made the following nominations, July 27, at Hartford: For Governor, Charles Steele; Lieutenant Governor, John J. Copp; Secretary of State, Robert N. Stanley; Treasurer, Oliver G. Beard; Comptroller, William Ingalls.

The ticket of the Socialist-Labor party was: For Governor, Adam Marx; Lieutenant Governor, James M. Parker; Secretary, Faustin Serré; Treasurer, Edward Laphorn; Comptroller, Henry Mathern.

The Social Democratic party named: For Governor, G. A. Sweetland; Lieutenant Governor, J. E. White; Secretary, I. G. Chatfield; Treasurer, William Bartels; Comptroller, W. J. Sansoucy.

The election resulted in favor of the Republican ticket. The vote on the presidential electors stood: McKinley, 102,572; Bryan, 74,014. For Governor: McLean, 95,822; Bronson, 81,420; Steele, 1,548. The Socialist vote on Governor was 932. The Senate will have 22 Republicans and 2 Democrats. The House will be composed of 201 Republicans and 54 Democrats.

COSTA RICA, a republic in Central America. The legislative power is vested in the Congress or House of Representatives, 32 in number, elected for four years, one half being replaced every two years, in the proportion of 1 to 8,000 of population, in electoral colleges, for which every male citizen who is self-supporting has a vote. The President, who is elected for four years, is Rafael Iglesias, elected for the term beginning May 8, 1898. The Vice-President is Iglesias Llorente. The Cabinet at the beginning of 1900 was composed as follows: Secretary of State for Foreign Affairs, Worthington, Education, Charities, and Justice, J. A. Castro; Secretary of the Interior, Police, and Public Works, Ricardo Pacheco; Secretary of the Treasury, Juan B. Quirós; Secretary of War and the Navy, José Astúa Aquilar.

Area and Population.—The area of the republic is about 23,000 square miles. The population was reckoned at 294,940 in March, 1897. Since 1894 the net immigration has been about 1,000 a year. In 1892 there were 6,289 foreigners, of whom 831 were Spanish, 634 Jamaican, 622 Italian, 342 German, 246 English, and 204 from the United States. The Government has made liberal concessions for the purpose of attracting colonists. The descendants of Spanish settlers live in and around the towns, chief of which is San José, the seat of government, with about 25,000 inhabitants. The public schools number 327. There are also 5 institutions for superior education. Education is free and compulsory, and the law is strictly enforced. A regular military force of 600 men is maintained, and there is a militia of 12,000 men kept in training, which can be increased in war to 34,000 by calling out all males between eighteen and fifty years of age. The naval force consists of a gunboat and a torpedo boat.

Finances.—The revenue for 1899 was 8,413,199 pesos, of which 2,735,974 pesos were derived from customs and 2,300,000 pesos from excise. The expenditure was 8,069,748 pesos, of which 5,232,168 pesos were spent for government and 1,377,525 pesos for debt. The foreign debt, incurred mainly for an interoceanic railroad that was not built, has been scaled down on the ground of the depreciation of silver, the Government having failed to pay interest until the arrears amounted to nearly as much as the principal. Of the new bonds, £1,475,000 pay 2½ per cent. and £525,000 pay 3 per cent. Besides these the Government owes £90,000 of foreign debt and 2,922,221 pesos of internal debt. The adoption of the gold standard was voted in 1896, and the ratio of gold to silver was fixed at 26½ to 1. The project has not yet been carried out. The silver coinage in circulation is 350,000 pesos, and there is no gold, the principal currency being bank notes, 3,300,000 pesos in 1896, protected by a specie reserve of 1,250,000 pesos, but worth only 46 per cent. of their nominal value in exchange.

Commerce and Production.—Coffee is the most profitable product, and bananas come next. Corn, rice, yams, and potatoes are the principal food crops. Cacao culture is not of long standing, and is rapidly extending. The live stock, mostly cattle, was valued in 1897 at 12,695,000 pesos. The working of gold and silver mines has nearly ceased. The value of imports in 1898 was 4,258,896 pesos in gold, compared with 5,460,944 pesos in 1897; value of exports, 5,474,774 pesos in 1897 and 5,659,219 pesos in 1898. The export of coffee in 1899 was 19,486,125 kilogrammes, valued at 4,209,570 pesos. Of bananas, 2,331,036 bunches were exported. Other exports are cedar wood, various cabinet woods, and hides. The number of vessels that called at Limón and Punta Arenas in 1898 was 449. The shipping of Costa Rica consists of 3 steamers, of 600 tons, and 2 sailing vessels, of 551 tons.

Railroads, Posts, and Telegraphs.—The section of the long projected transisthmian railroad that runs from Port Limón inland stops at Alajuela, 117 miles from the Gulf coast. The Pacific section, from Punta Arenas to Esparza, is only 14 miles long. There are 917 miles of telegraph lines. The number of messages in 1897 was 382,116. The number of letters and other pieces carried in the mails in 1896 was 1,164,807 in the internal and 822,190 in the foreign service.

The Colombian Boundary.—An old frontier dispute between Costa Rica and Colombia was referred to the decision of the President of the French Republic. This was rendered in September, 1900. The award makes the cordillera of the

mountains the frontier line, which starts from Punta Mona, on the Atlantic coast, crosses northward the valleys of the Tarina and Sixola rivers, then follows a line drawn about 9° of north latitude, bends so as to correspond with the water parting between the Chiriqui Viejo and the streams falling into the Gulf of Dulce, and ends on the Pacific at Punta Burica. All the islands near the coast east of Punta Mona belong to Colombia, and those farther away from the continent lying between the Mosquito coast and the Isthmus of Panama. In the Pacific, the Burica Islands and all islands to the eastward of them are Colombian; all those west of that point are assigned to Costa Rica.

CRETE, an island in the Mediterranean, formerly a Turkish vilayet, now an autonomous province under the suzerainty of the Sultan. Insurrections of the Christian part of the population have occurred at frequent intervals since the Hellenes won their independence. When the people again rose in 1896, aided by volunteers from Greece, the great powers intervened. The naval forces of England, Austria, France, Germany, Italy, and Russia blockaded the coast to prevent the arrival of re-enforcements and the landing of arms, either for the insurgents or the Turkish garrison, and detachments of marines occupied the ports to preserve order. The powers intervened also in the war between Greece and Turkey that grew out of the Cretan insurrection. The Sultan granted autonomous government to Crete in the final settlement, and at the suggestion of the powers nominated as Commissary General of Crete Prince Georgios of Greece, born June 24, 1869, the second son of the King of the Hellenes. He assumed office on Dec. 21, 1898.

Crete is a mountainous island with patches of exceeding fertility in the valleys and lowlands. The products are olives, grapes, citrus fruits, tobacco, cotton, silk, grain, etc. The area is 3,326 square miles, with 294,192 inhabitants in 1896, of whom 88,487 were Mohammedans. Canea, the present capital, has, according to a census taken on June 17, 1900, 21,475 inhabitants; Candia, the former capital, 22,026; Retimo, 8,354. The number of Mohammedans in the three cities was ascertained to be 26,177, which is practically the total Mussulman population remaining on the island, as few of the Mohammedans returned to their homes in the country after the installation of the Christian government, and a large proportion of those who did were obliged to emigrate. About 2,000 Mohammedans lost their lives during the insurrections of 1896 and 1897, and 60,000 have since emigrated.

Germany and Austria withdrew from the occupation of Crete and from the concert of guaranteeing powers. A constitution was adopted in April, 1899, by which the legislative power is vested in a National Assembly of 188 members, of whom 50 are Mohammedans, elected for three years by the adult males. The executive power is vested in the Commissary General, advised by a Council of 5 members presiding over various branches of the administration, one of whom must be a Mohammedan. The island is divided into 5 prefectures. Greek is the official language. A militia has been organized, service in which is compulsory. The Government was authorized by the Constituent Assembly to contract a loan of 9,000,000 francs at 3 per cent., 4,000,000 francs to indemnify the powers for the expenses of the occupation and 5,000,000 francs to compensate Cretans for their losses suffered during the insurrection and enable them to resume agricultural production and to found a national bank. The establishment of the

bank with a capital of 10,000,000 drachmai and a exclusive right to emit bank notes was approved in May, 1899. The Council of Ministers, constituted Feb. 20, 1899, is composed as follows: Minister of Justice, C. Venezelos; Minister of Finance, M. Fomimis; Minister of Public Instruction and Worship, Nicolas Giamalakakis; Minister of the Interior and Public Works, Hussein Jenitzarakis. A conference at Rome of the representatives of England, France, and Russia, and the Italian Minister of Foreign Affairs agreed, in May, 1900, to the issue of a long loan with a sinking fund, besides a special loan for the settlement of indemnities for losses suffered by foreigners, and decided that the question of the share of revenues of the island to be assigned to the Ottoman public debt should be submitted to arbitration.

CUBA, an island of the West Indies, formerly a Spanish colony; since December, 1898, in the military occupation of the United States. The treaty of peace between the United States and Spain, whereby Spain relinquished all authority over the island, was signed at Paris, on Dec. 10, 1898, and ratified by the United States Senate on Feb. 6 and by the Queen Regent of Spain on Mar. 17, 1899. The United States Government assumed the responsibility of preserving order and protecting life and property until such time as the Cuban people should organize a stable government capable of maintaining internal order and fulfilling international obligations. Under Gen. John Brooke, the first military Governor General, who had control of the civil administration as well of military affairs, Cuban mayors and aldermen were appointed in every municipality and a Supreme Court was established. The post office was organized on the model of that of the United States. A new and more general system of public education was introduced. There were 843 public schools in 1899. Gen. Leonard Wood was appointed Governor General late in 1899.

Area and Population.—The area of Cuba is estimated at 45,872 square miles. The population enumerated at the census of 1887 was 1,631,636, comprising 882,600 males and 749,087 females. The colored population was 528,798. Havana, the capital, contained 200,448 inhabitants. The total population in 1895 was estimated at 2,018,000. In 1899, in consequence of the war of liberation, had diminished to 1,572,797, according to a census taken under the direction of the United States military authorities, showing a decrease of 58.8 in twelve years, attributable to the war of liberation, especially the starvation and exposure incident to Gen. Weyler's reconcentration policy. The census was taken by Cubans under Cuban supervisors, who were instructed for their work in Washington. The enumerators were women, it being the first time that Cuban women were employed in the public service. In 79 districts of the 4 western provinces—viz., Santa Clara, Matanzas, Havana, and Pinar del Rio—there was a diminution of population compared with 1887. In the remaining 16 districts there were slight gains, and in the 47 districts of Santiago and Puerto Principe, the eastern provinces, the population increased considerably. The districts of the western provinces that showed gains were those in which the reconcentrados were collected or those in which there was little or no reconcentration. There are 96 towns of more than 1,000 inhabitants, 16 of which have more than 8,000, 5 more than 25,000, and 1 more than 200,000. The population of Havana was 235,981. The center of population is in Santa Clara province, 8 miles northeast of Cienfuegos, having moved 24 miles to the southeast since 1887. The native whites constitute 57.8 per cent. of the total

population, foreign whites about 9 per cent., colored 32 per cent., and Chinese less than 1 per cent. The foreign-born live mostly in the cities, nearly one third of them in Havana. Of the total population, 83 per cent. are Cubans, 1 per cent. claimed Spanish citizenship, and 11 per cent. had not declared their intentions when the census was taken. There were 1,004,884 persons, 63.9 per cent. of the total, who could neither read nor write; 33,003, or 1 per cent., who could read but not write; 514,340, or 32.7 per cent., who could read and write, but had no superior education; and 19,158, or 1.2 per cent., who had superior education. The persons born out of wedlock constitute 13½ per cent. of the population.

Finances.—The revenue for 1899 was estimated at \$26,359,650, of which \$14,705,000 came from customs, \$6,142,500 from taxation, \$1,900,000 from the lottery, \$1,640,650 from stamps, etc., \$435,000 from rational property, and \$1,536,000 from other sources. The expenditures were estimated at \$26,56,731, including \$12,574,709 for the debt, \$2,45,150 for the executive, \$1,941,932 for the national church and justice, \$5,896,741 for war, \$1,055,136 for marine, \$1,036,582 for agriculture, industry, and commerce, \$708,979 for finance, \$247,033 for education, and \$142,290 for other expenses. The approximate amount of the funded debt when the Spaniards left Cuba was \$253,000,000, none of which was assumed as a charge on the Cuban people, who were released also from the additional debt of about \$100,000,000 incurred by Spain in attempting to suppress the last insurrection.

Commerce and Production.—There were 90,000 plantations in Cuba in 1891, having an estimated value of \$220,000,000, or \$17,000,000 a year. The live stock consisted of 584,725 horses and mules, 2,485,766 horned cattle, 78,494 sheep, and 70,194 hogs. In the course of the war of independence the animals were consumed and almost disappeared, not more than 25,000 cattle, 5,500 horses, 2,150 mules, 8,500 hogs, and 4,500 sheep remaining, according to an estimate made in 1899. The sugar and tobacco plantations were devastated, of the former not more than 526 being worked in 1899 out of 1,369 that existed in 1895, of the latter not more than 1,250 out of 9,487, and of coffee plantations only 115 out of 998. Fruit and vegetable cultivation as well as stock farming was practically abandoned, and 120,000 plantations that were in existence in 1895 relapsed into the wild state. Against 22,156 commercial houses and manufacturing businesses in 1895 there were only about 13,500 in 1899. The exports, amounting to 100,000,000 before the war, were reduced by four years of guerrilla warfare to a fifth of that sum. The sugar crop receded from 1,004,264 tons in 1895 to 225,221 tons in 1896, 212,051 tons in 1897, 14,123 tons in 1898, and 25,098 tons in 1899. The average tobacco crop has been 560,000 bales of 110 pounds, of which 338,000 bales were exported and 22,000 bales were made up into cigars and cigarettes in the factories of Havana. There were 35,914,000 cigars exported in 1896 and 123,417,000 in 1897, but only 91,812,000 in 1898. The export of cigarettes in 1895 was 48,163,846 packages. The raw tobacco exported goes mostly to the United

States, and about half of the exports of cigars. Minor exports from Cuba are mahogany and other woods, oranges and other fruits, and beeswax and honey. Mining is carried on in the province of Santiago de Cuba. There are two American companies, which ship from 30,000 to 50,000 tons of ore to the United States every month. In 1891 there were 138 iron, 88 manganese, and 53 copper mines.

The total value of imports in 1895 was \$61,443,335. The value of exports was \$110,285,020. The value of the sugar exported was \$76,596,617; cigars, \$24,047,841; rum and liquors, \$1,034,470; timber, \$884,601; other articles, \$7,721,491. The exports in 1892 were \$92,752,000 in value and the imports were \$63,764,265. In 1899 the imports were about the same, the value being \$64,343,210, but the exports were only \$43,880,740. British and other foreign capital was invested in Cuba in the purchase of railroads, cigar factories, sugar plantations, etc., but very few new enterprises were started. The imports consisted mainly of food substances, clothing, liquors, and other articles of consumption, while of tools, machinery, or other material for productive enterprise or for public works the imports were small. The value of food products amounted to half the total value of the imports of Havana, which receives 75 per cent. of the imports of the island. The mortgage indebtedness in Cuba as reported in the census of 1899 constitutes 58 per cent. of the value of the rural real estate and 79 per cent. of that of the urban real estate according to the valuation on the registers of property made before the American occupation began.

Railroads and Telegraphs.—There are 1,135 miles of railroad, besides private branches running to the larger sugar plantations.

The telegraphs have a total length of 2,301 miles, with 3,450 miles of wire. The number of messages in 1894 was 357,914.

Constitutional Convention.—A convention to frame a constitution for the Cuban republic was elected by the people and opened on Nov. 6, by Gov.-Gen. Wood, who said that it would be the duty of the delegates to draft and adopt a constitution adequate to secure stable, orderly, and free government and to formulate what ought to be the relations between Cuba and the United States in their opinion, after which the Government of the United States would doubtless take such action as should lead to a final agreement between the peoples of the two countries to the promotion of their common interests. The convention, consisting of 31 delegates, elected as temporary chairman Señor Llorente, Justice of the Supreme Court. The delegates took an oath renouncing any allegiance to or compact with any state or nation, swearing to uphold the sovereignty of the free and independent people of Cuba, and to respect the solution that the convention should adopt as well as the government to be established by the constitution. Mendez Capote, who was Vice-President of the revolutionary government and Secretary of State under Major-Gen. Brooke's administration, was elected on Nov. 24 to be president of the Cuban Constitutional Convention, receiving 17 votes from the Radical Republicans against 11 cast by the Nationals for Eudaldo Tamayo.

D

DELAWARE, a Middle Atlantic State, one of the original thirteen, ratified the Constitution Dec. 7, 1787; area, 2,120 square miles. The popu-

lation, according to each decennial census, was 50,096 in 1790; 64,273 in 1800; 72,674 in 1810; 72,749 in 1820; 76,748 in 1830; 78,085 in 1840;

91,532 in 1850; 112,216 in 1860; 125,015 in 1870; 146,608 in 1880; 168,493 in 1890; and 184,735 in 1900. Capital, Dover.

Government.—The following were the State officers in 1900: Governor, Ebe W. Tunnell; Secretary of State, James H. Hughes; Treasurer, L. Heisler Ball; Auditor, John A. Lingo, who died Jan. 26, and was succeeded by Isaac N. Fooks; Attorney-General, Robert C. White; Commissioner of Insurance, Edward Fowler; Adjutant General, Garrett J. Hart; Inspector of Agriculture, E. H. Bancroft; Chancellor, John R. Nicholson; Chief Justice, Charles B. Lore; Associate Justices, Ignatius C. Grubb, W. C. Spruance, James Pennewill, and William H. Boyce; Clerk, William Virdin. All are Democrats except Messrs. Ball and Lingo and Justices Spruance and Pennewill, who are Republicans.

Population.—The population of counties in 1890 and in 1900 was as follows:

COUNTIES.	1900.	1890.
Kent.....	32,762	32,667
New Castle.....	109,697	97,184
Sussex.....	42,276	38,642

The population of the principal cities in 1900 was: Wilmington, 76,558; New Castle, 3,380; Dover, 3,329; Milford, 2,500; Lewes, 2,259; Smyrna, 2,168; Laurel, 1,825; Seaford, 1,724; Georgetown, 1,658; Middletown, 1,567; Harrington, 1,242; Newark, 1,213; Delaware City, 1,132.

Finances.—The joint committee of the Legislature to settle with State officers found that the Secretary of State had received from incorporation fees \$69,739.89 since March 13, 1899, and that 396 companies had been incorporated under the general corporation act. The accounts of the State Treasurer for the year ending Jan. 9 showed the following figures in recapitulation: Balance in general fund, \$65,152.33; Delaware General Electric Railroad Company (guarantee fund), \$17,500; New Castle and Delaware City Railroad Company (guarantee fund), \$4,500; total, \$43,152.33. Balance in school fund, Jan. 9, 1900, \$34,035.90; balance in sinking fund, Jan. 9, 1900, \$4,483.73; total, \$81,671.96; guarantee fund, \$22,000; grand total, \$103,671.96. There was practically no money at the beginning of 1899, as there were debts amounting to more than was in the treasury. Two notes amounting to \$85,000 were paid in the year.

The amount of State licenses of all kinds for the year ending Sept. 29 is given as \$114,359.23, an increase of \$5,280 over the amount of the year preceding. The revenue from taxation of railroads, according to the Treasurer's report, was \$68,653.30. The Adams law for taxation of investments has been attacked as unconstitutional.

Wilmington had a bonded debt of \$1,965,100 at the beginning of the year.

Militia.—The National Guard, which was somewhat broken up by enlistments for the Spanish war, is improving, companies being refilled. The Government appropriation under the new law is \$5,175 a year, to be drawn in clothing, arms, and camp and garrison equipage.

Education.—The reports of the public schools of the State, outside of Wilmington, give the following statistics: Total enrollment in all schools (white), 22,254; monthly attendance, 15,938; number in graded schools (those having more than one teacher), 10,280; in rural districts—white, 11,974; colored, 4,677; amount paid in salaries in white schools, \$141,059; colored, \$18,627.94; for text-books—white, \$8,277.18; colored,

\$1,459; total expenditures for white schools, \$194,300.63; for colored, \$22,826.94; number of graded schools having libraries—New Castle County, 4; Kent, 7; Sussex, 1; number of schools in rural districts having libraries—Kent County, 2, where are good circulating libraries under the control of the State Federation of Women's Clubs; average monthly salary of principals in New Castle County, \$53; Kent, \$50; Sussex, \$53.50; assistants, New Castle County, \$35; Kent, \$32.75; Sussex, \$29.25.

There are 22 Delaware students in the State Normal School at Westchester, Pa.

Delaware College granted diplomas to 14 students, June 20. The class that entered in September numbered 25, of whom 19 are in the agricultural and engineering courses. A new curriculum went into effect this year, giving more freedom for elective studies. The college and the experiment station have about 10,000 books, of which 3,000 are in the general library.

The Wilmington Military Academy graduated 4 in the scientific course and 1 in a special course in June.

Attention was called this year to a so-called "University of Delaware," which was offering inducements to residents of Europe and parts of the United States who desire the degree of doctor of philosophy. The incorporators were found to be a dentist, a saloon keeper, and a trimmer for a car company. The two latter knew very little about the institution, but had signed because they were asked to. The dentist could not be found. Under its charter the "university" can teach dental surgery and the science of philosophy, and confer degrees for these courses, and also confer honorary degrees. The charter is perpetual, and the "university" can operate in any part of the world.

Public Institutions.—The Hospital for the Insane, at Farnhurst, had 320 patients in August. The expenses for the first four months of the year were \$9,176.46.

The Ferris Industrial School for Boys had 70 inmates at the opening of the year. The receipts, including a balance of \$1,207.31, were \$17,447.07; the balance remaining, \$2,846.59. A farm of 200 acres is cultivated by the boys.

The Industrial School for Girls is supported in part by the State and in part by voluntary subscriptions. There were 19 girls present in May; accommodations are provided for 50.

The Delaware Orphan Home and Industrial School for Colored Boys was opened at Wilmington in November. It is maintained by colored residents.

Business.—From statistics of failures in 1899 it is learned that there were 30 in Delaware, with liabilities amounting to \$95,954 and assets to \$47,431. In 1898 there were 21, with \$136,450 liabilities and \$71,700 assets; and in 1897, 45, with \$210,800 liabilities and \$91,950 assets.

The clearings at Wilmington banks for one week of April, 1900, were \$1,139,314.52, as against \$876,957.87 for the corresponding period of 1899. The clearings for 1898 were about \$37,000,000, and for 1899 \$42,000,000. For the six months ending April 1 they were \$24,353,054.

Railroads.—The report of the Delaware Railroad Company for the year ending Oct. 31, 1899, shows the following figures: Freight earnings, \$895,833.92; passenger, \$404,575.54; mails, express, rents, and miscellaneous, \$91,127; total gross earnings, \$1,391,536.46; operating expenses, \$988,743.52; net earnings, \$402,792.94; interest and premiums on securities matured, \$14,110.54; gross income, \$416,903.48; interest, taxes, and sundry charges,

\$84,513.32; net income, \$332,390.16. The figures show an increase in freight receipts of \$104,246.85; in passenger receipts, of \$67,060.56; in receipts from mail, express, rents, and miscellaneous, of \$8,732.30; total increase, \$180,059.71.

The report of the Wilmington and New Castle Railway Company for the year ending June 30 shows: Gross receipts, railway and electric light, \$42,158.52; operating expenses, including insurance, accidents, and damages, \$23,003.90; earnings over operating expenses, \$19,154.62; sale of capital stock, 400 shares at \$10 par, \$4,000; income, \$23,154.62.

Wilmington Harbor.—The amount expended for the improvement of Christiana river and Wilmington harbor to June 30, 1890, was \$453,552.62, of which \$51,357.84 was expended on the present project.

Political.—State officers were chosen at the November election.

Two conventions were held by the Republicans early in the year to choose delegates to the national convention. The Union, or "Addicks," Republicans had proposed to the regular Republicans that a joint call should be issued for a common primary on the basis of equality of representation in the 35 legislative districts, but the proposition was rejected. The regular convention was called for Feb. 27, and the Union call followed for the same day. Later, the former faction changed to March 21, on account of a rule adopted by the national committee, requiring thirty days' notice instead of twenty. It was then too late for the other convention to be called for the same day, as only thirty days intervened between the call of the regulars and the date they had fixed, and the Union Republicans met April 3. The Credentials Committee of the Republican National Convention, by a vote of 38 to 9, reported in favor of seating the Union delegation. The regular Republicans refused to accept a half vote at the convention.

The regular Republicans called a convention for nominating State officers for Aug. 21. The Union Republicans assembled Aug. 6, having changed their first date of Aug. 23. They made nominations at the former date, and then held another convention, Aug. 23, at which time they accepted the presidential electors nominated by the regulars. The ticket of the regulars differed except as to the electors, the Attorney-General, and the candidate for the unexpired term in Congress of H. Hoeffcker, deceased, for which both factions nominated his son. But in October the two factions agreed upon a ticket, which was: For Governor, John Hunn; Lieutenant Governor, Philip Cannon; Attorney-General, Herbert H. Ward; Insurance Commissioner, George W. Marshall; Treasurer, Martin B. Burris; Auditor, Purnal B. Morton; Representative in Congress—short term, Walter O. Hoeffcker; long term, L. Heisler Ball.

The Democratic convention was held Sept. 11. The ticket follows: For Governor, Peter J. Ford; Lieutenant Governor, William F. Hoey; Attorney-General, Peter L. Cooper, Jr.; Insurance Commissioner, Francis D. Baldwin; Treasurer, William L. Erman; Auditor, Waller Donoho; Representative in Congress—short term, Edward Fowler; long term, Alexander M. Daly.

The Prohibitionists nominated: For Governor, Richard M. Cooper; Lieutenant Governor, John Sutton; Insurance Commissioner, Charles H. Mason; Treasurer, W. H. Ridgeway; Auditor, Daniel B. Maloney; Representative in Congress—short term, Lewis M. Price; long term, L. W. Rosius.

The Social Democratic candidates were: For

Governor, Gustav E. Reinicke; Lieutenant Governor, Paul Scheuler; Representative in Congress—short term, John J. Mettler; long term, Nathan Shtofman.

The Republicans carried the State. On presidential electors the vote stood: Average Republican, 22,529; Democratic, 18,858; Prohibitionist, 538; Social Democratic, 57. For Governor: Republican, 22,421; Democratic, 18,808; Prohibitionist, 574; Social Democratic, 59.

The Legislature will stand: Republicans, 9; Democrats, 8. House: Republicans, 20; Democrats, 15.

DENMARK, a kingdom in northern Europe. The legislative body, called the Rigsdag, consists of an upper house, the Landsting, containing 66 members, 12 appointed for life by the Crown and 54 elected for eight years by indirect suffrage, and a popular assembly, the Folkething, containing 114 members elected by the direct suffrage of all male citizens thirty years of age, excepting criminals, paupers, and servants, for three years, one member for every 16,000 inhabitants. The reigning King is Christian IX, born April 18, 1818, son of the Duke of Schleswig-Holstein-Sonderburg-Glücksburg, appointed by the treaty signed at London on May 8, 1852, heir to Frederik VII, the last sovereign of the house Oldenburg, whom he succeeded on Nov. 15, 1863. The heir apparent is Prince Frederik, born June 3, 1843. The Cabinet of Ministers at the beginning of 1900 was composed of the following members: President of the Council and Minister of Finance, H. E. Hørring, appointed May 25, 1897; Minister of the Interior, V. de Ludvig Bramsen, appointed Aug. 28, 1899; Minister of Justice and for Iceland, H. E. Hørring, *ad interim*; Minister of Foreign Affairs, N. F. Ravn, *ad interim*; Minister of War, Col. J. G. F. Schnack, appointed Aug. 28, 1899; Minister of Marine, Vice-Admiral N. F. Ravn, appointed Jan. 4, 1879; Minister of Education and Worship, Bishop H. V. Sthyr, appointed May 25, 1897; Minister of Agriculture, Alfred Hage, appointed May 25, 1897.

Area and Population.—Denmark has an area of 15,289 square miles, and in 1890 had 2,185,335 inhabitants, of whom 1,059,322 were males and 1,112,983 females. The annual increase since 1870 had averaged 1 per cent. Of the total population 882,000 depended on agriculture, 534,000 on industries, and 208,000 were day laborers or of no fixed occupation. The number of marriages in 1898 was 17,872; of births, 71,677; of deaths, 36,669; excess of births, 35,008. The number of emigrants, nearly all destined for the United States, was 2,340 in 1898 and the same number in 1899.

Finances.—The revenue in 1899 was 71,193,060 kroner, and expenditure 76,259,212 kroner. The estimated revenue for 1900 was 67,672,188 kroner; estimated expenditure, 69,494,095 kroner. For 1901 the revenue was estimated at 72,875,070 kroner, and expenditure at 72,178,455 kroner. Of the revenue indirect taxes give 51,389,100 kroner, mainly customs and excise receipts; direct taxes, 10,638,700 kroner; interest on state assets, 4,443,043 kroner; revenue from capital and funding of debt, 3,659,905 kroner; balance from lotteries, 1,090,000 kroner; balance from domains, 893,424 kroner; separate revenues, 538,317 kroner; posts and telegraphs, 222,581 kroner. The expenditures were allotted as follow: Ministry of War, 11,022,419 kroner; Ministry of Marine, 7,787,316 kroner; interest and management of state debt, 7,059,300 kroner; Ministry of Public Worship and Instruction, 6,344,134 kroner; Ministry of Finance, 4,784,848 kroner; pensions, civil and military, 3,349,541 kroner; Ministry of Agriculture, 3,223,082 kroner;

improvement of state property and reduction of debt, 1,802,731 kroner; civil list and appanages, 1,203,200 kroner; Ministry of Foreign Affairs, 707,956 kroner; Rigsdag and Council of State, 319,016 kroner; Iceland, 76,564 kroner. The reserve fund which is kept in order to provide funds to meet any sudden emergency amounted on March 31, 1899, to 17,890,925 kroner. The amount of the state debt on March 31, 1898, was 208,193,351 kroner. The foreign debt, most of which pays 3 per cent., amounted in 1899 to 138,512,250 kroner. The interest on public debts after deducting productive investments is only a little over 2 kroner per capita. The invested funds amount to 73,069,425 kroner, not including the railroads, valued at 228,061,820 kroner, nor the domains.

The Army.—All able-bodied Danes are liable to serve in the army, the period of service being eight years in the regular army and reserve and eight years more in the extra reserve. Conscripts receive six months of training for the infantry, eight for the cavalry, four for siege artillery, and three for field artillery and engineers. A second course of training for the less intelligent and diligent recruits lasts eight months for the infantry, eleven for the cavalry, and twelve for the artillery and engineers. The peace strength of the regular army in 1899 was 824 officers and 8,945 men. The war strength was 1,448 officers and 60,138 men.

The Navy.—The Danish war fleet, intended only for the defense of the coasts, contains 5 armor clads of various sizes and designs, from the Tordenskjold, torpedo ship, of 2,530 tons, carrying a 52-ton gun in an armored barbette, to the Helgoland, of 5,370 tons, armed with a 36-ton, 4 22-ton, and quick-firing guns. The new Herluf Trolle and an uncompleted sister ship carry a pair of 26-ton guns and have 9 inches of side armor. Three old ironclads are kept in commission for coast defense. There are 5 deck-protected cruisers of various classes, 8 old gunboats, a torpedo vessel, and 13 first-class and 12 second-class torpedo boats. The navy is manned by 285 officers and 1,337 sailors, gunners, miners, mechanics, and workmen.

Commerce and Production.—The production of wheat in 1898 was 1,054,000 hectolitres; barley, 7,705,000; oats, 14,620,000; rye, 5,684,000; potatoes, 5,838,000; beet root, etc., 46,770,000. The live stock in 1898 comprised 1,743,440 cattle, 449,264 horses, 1,074,413 sheep, 31,803 goats, and 1,178,514 hogs. The export of horses in 1898 was 15,423 in number; of cattle, 36,066; of sheep, 2,644. There were 75 distilleries in 1898, and they produced spirits containing 3,514,000 gallons of pure alcohol. The production of taxed beer was 21,090,000 gallons; of light beer, 30,070,000 gallons. The beet sugar, produced in 7 factories, amounted to 35,080 tons. The value of fish caught in 1897 was 6,415,148 kroner.

The total value of imports in 1898 was 462,219,000 kroner; of exports, 326,361,000 kroner. The exports of domestic products were 238,525,000 kroner in value, in which sum 204,200,000 kroner represent food substances, 25,400,000 kroner raw materials, 6,500,000 kroner articles of personal and household consumption, and 2,400,000 kroner seeds, fodder, and fertilizers. The special imports were 367,300,000 kroner in value, in which sum food substances came to 87,300,000 kroner, personal and domestic articles to 72,800,000 kroner, fuel to 27,900,000 kroner, fodder, manure, and seeds to 50,700,000 kroner, and raw products to 122,600,000 kroner. The imports of colonial products were 36,605,000 kroner in value; beverages, 7,269,000 kroner; textile manufactures, 55,211,000 kroner; metals and metal manufactures, 38,107,000

kroner; wood and wood manufactures, 27,619,000 kroner; coal, 30,197,000 kroner; animals, 2,445,000 kroner; pork, butter, eggs, and lard, 35,875,000 kroner; cereals, 69,281,000 kroner. The domestic exports of colonial goods were 1,013,000 kroner; beverages, 685,000 kroner; textiles, 630,000 kroner; metals and hardware, 2,369,000 kroner; wood and wood manufactures, 632,000 kroner; coal, 5,000 kroner; animals, 15,417,000 kroner; butter, eggs, lard, etc., 171,409,000 kroner; cereals, 9,394,000 kroner. In the general exports colonial goods came to 13,198,000 kroner; beverages, 3,350,000 kroner; textiles, 6,585,000 kroner; metals and hardware, 7,239,000 kroner; wood and manufactures, 1,575,000 kroner; coal, 2,947,000 kroner; animals, 15,437,000 kroner; butter, eggs, and products, 194,115,000 kroner; cereals, 17,351,000 kroner. The general commerce with different countries in 1898 was in kroner as follows:

COUNTRIES.	Imports.	Exports.
Great Britain.....	97,187,000	199,922,000
Germany.....	133,701,000	56,401,000
Sweden and Norway.....	60,934,000	43,349,000
United States.....	64,092,000	2,417,000
Russia and Finland.....	37,919,000	13,883,000
France.....	9,144,000	863,000
Netherlands.....	8,564,000	724,000
Belgium.....	7,751,000	1,063,000
Danish colonies.....	3,499,000	3,645,000
Rest of America.....	6,486,000	18,000

Navigation.—The number of vessels in the foreign trade entered at Danish ports during 1898 was 32,166, with 2,884,441 tons of cargo; cleared, 32,716, with 725,657 tons of cargo. The number of coasting vessels entered was 36,298; cleared, 39,932. The merchant navy on Jan. 1, 1899, consisted of 3,774 vessels, of 394,685 tons, counting all or above 4 tons, and of the total number 510,225,422 tons, were steamers.

Railroads, Posts, and Telegraphs.—The railroads in 1898 had a total length of 1,568 miles, of which 1,108 miles belonged to the state.

The postal traffic for 1898 was 84,877,838 letters and post cards, and 79,613,655 newspapers, samples, etc.

The length of telegraphs in the Government network in 1898 was 3,029 miles, with 8,733 miles of wire. There were dispatched during that year 2,106,376 messages, of which 573,656 were international, and 1,379,444 foreign private messages, and 15,276 were meteorological and official messages. The telephone lines had a length of 590 miles, with 1,476 miles of double wire.

Change of Ministry.—The Hørring ministry took office in May, 1897, in the face of a strong adverse majority in the popular chamber, where Moderate Liberals, 55 Radicals, and 9 Socialists were united in the Opposition, and only 24 Conservatives supported the Government. The ministry was appointed to carry on the old conflict which hinges on the question whether the King shall choose his advisers or whether the ministers shall represent the popular majority. The retention of the minority party in power provoked the conflict which caused a stoppage of normal constitutional government, so that from 1885 to 1894 no budget was voted in Denmark, and the Government promulgated provisional finance laws by royal decree. Baron Reedtz-Thomsen, Hørring's predecessor, endeavored to win the Opposition in the Folkething by concessions, and this policy went further than the Conservatives the Landsthing approved, and so fell between the stools. The Hørring ministry was a continuation of the former one, in which Hørring held the post of Minister of the Interior, and it therefore encountered

ed from the beginning the same difficulties. The position resisted particularly the military policy of the Government, which demanded the completion of the coast fortifications of Copenhagen. In 1898, declaring that the country was in danger, the Government, on its own authority, having decided to carry the project through the Rigsdag, appropriated 500,000 kroner for the fortification of the capital on the seaward side. The Opposition was highly indignant at this new act of arbitrary government, recalling the policy of the Estrup ministry, which ruled without Parliament. Hørring, however, had not undertaken to revive the constitutional conflict. When he saw that his ministry was doomed he sought to postpone the matter day by day by making changes in the Cabinet, replacing the Minister of War, Col. Tuxen, with an officer esteemed by the Opposition, putting Bramming into the Ministry of the Interior, and removing another obnoxious member of the Cabinet. This did not avert the storm, however, and as soon as the Rigsdag assembled, on Oct. 2, 1899, it broke out. The war budget, in which the 500,000 crowns spent arbitrarily on the defenses of Copenhagen, appeared, and four tax bills that had been discussed in previous sessions afforded the chief points of attack. These tax bills provided for the conversion of certain Government taxes into communal taxes, a new tax on capital and incomes, the alteration of the customs tariff, and an increase in the tax on spirits. The Government demanded that the matter should be dealt with as a whole. The brandy tax was intended to make up the deficiency caused by a lowering of customs duties. The Opposition was willing enough to reduce import duties, but not to make brandy dearer, although the Government had considerably moderated the spirit duty provided in the bill submitted in the previous year. The Folkething decided that it would not discuss the brandy tax at all, but that the three other measures should be the subject of a compromise to be arranged with the Right. The Government would not agree to this because the tariff reduction without the substituted brandy duty would mean a loss of revenue. The Left in the Folkething appointed a committee to discuss the lowering of communal taxes in connection with the introduction of an income and property tax. When the Folkething rejected the project of augmenting the land tax the ministry resigned. The elections of 1899 increased the Radicals in the lower chamber to 63 and the Socialists to 12, and reduced the Moderate Liberals to 23 and the Ministerialists to 15. Even in the Landsting the ministerial majority was not large, including the members nominated by the King. Still it was a lasting triumph, which would oppose a Radical Cabinet as vigorously and uncompromisingly as the Radicals formerly opposed the Conservative Estrup Cabinet. If the King could overcome his repugnance to the Left sufficiently to accept a radical ministry it would only lead to a renewal of the constitutional conflict with the position of the parties reversed, and probably would result in a fresh deadlock. The successor chosen for H. Hørring was before a Conservative of the same stripe as himself, H. Schested, the vice-president of the Landsting, whose hope of success depended on his following an agrarian policy that would attract to the Conservative Agrarians in the Landsting and the Radical Agrarians in the Folkething. The Rigsdag session was closed by royal decree on April 26, and on April 27 the new ministry was announced as follows: President of the Council and Minister of Foreign Affairs, Hannibal Sehested; Minister of the Interior, V. de Ludvig Madsen; Minister of Public Works, Railroads,

Posts, and Telegraphs, Baron Juul Rysensteen; Minister of Marine, Commander Middelboe; Minister of Justice, Dr. Goos; Minister of War, Col. J. G. F. Schnack; Minister of Agriculture, Herr Friis.

DISCIPLES OF CHRIST. The report of the General Statistician to the General Missionary Convention of the Disciples gave the whole number of churches as 10,528, and of members as 1,149,982, showing gains for the year of 127 churches and 31,982 members; and the amount raised for all benevolent and educational purposes as \$5,714,638, an increase of \$244,043. The number of Christian Endeavor Societies was 5,001, or 10 more than in the previous year. The schools for ministers, including the Bible chairs at the University of Virginia and Ann Arbor, Mich., the Disciples' Divinity House, Chicago, and two other schools, returned 442 students; while more than 1,300 students were taking the Bible Extension course of the Ann Arbor school.

The annual meeting of the American Christian Missionary Convention began at Kansas City, Mo., Oct. 11, with that of the Christian Woman's Board of Missions. This society had received during the year \$106,723, and had co-operated in expenditure and labor with the work of the other societies represented in the convention. Arrangements were made with the American Christian Missionary Society for the transfer of the work of the Board of Negro Evangelization and Education to its care. The American Christian Missionary Society, whose work is in the United States and Canada, met Oct. 13, 15, and 16. It had employed during the year 168 missionaries, together with 27 laborers of the Board of Negro Evangelization and Education, in 37 States and Territories, and had engaged in city evangelization or city missions in 16 large cities. The missionaries reported 6,028 additions to the churches, 53 churches organized, and 23 houses of worship completed during the year. The total receipts of the board had been \$63,627, while the various State and district societies had raised and expended \$114,368 for mission work in their respective fields, and the Woman's Board of Missions had expended \$30,000 for home missions. The aggregate results of all the three agencies showed 1,363 places helped, 202 churches organized, and 16,009 additions to the churches. The society had begun the year with a balance of \$3,460 in the treasury and no indebtedness, but, the appropriations having been larger than ever before, had closed it with a debt of about \$3,000. A committee was appointed at the meeting to confer with a like committee of the Free Baptists with reference to union.

The meeting of the Foreign Christian Missionary Society was held Oct. 16. The report represented that the past year had been the most prosperous in its history. The receipts from all sources had amounted to \$180,016, showing a gain of \$27,289 over those of the previous year. The offerings of the 3,067 contributing churches, as churches—\$65,964 in all—showed an average of \$21.50 per church, a gain of 40 per cent. over the average four years before. Four churches had been added to the number of those supporting one missionary each. The Sunday schools had contributed \$42,705, and the Christian Endeavor Societies \$2,966. Twenty-two hundred and twenty-nine dollars had been received from bequests, and \$30,425 on the annuity plan. Twelve missionaries had been sent out during the year, 2 had resigned, and 1 had united with another mission. Reports were made from missions in India, where 65 converts had been added and 1,831 children were enrolled

in the Sunday schools and 515 in the day schools, and more than \$35,000 had been sent by and through the society for the relief of sufferers by famine; Japan, where 95 converts, 706 members, 738 children in Sunday schools and 138 in day schools were returned; China, where 183 members had been added, making the present membership 565, and the missions had escaped damage from the disturbances; Turkey, where the converts numbered 65 and the present membership was 529; England, where the prevalence of the war spirit had prevented advance, and a small loss was returned; and Scandinavia, where 81 converts and a present membership of 1,209 were returned, but emigration had helped to thin the ranks. A new mission had been begun in the Sandwich Islands. Missionaries had been laboring during the year at Bolengi, on the Congo river, where friendly relations were maintained with the Baptist missions. A mission had been opened in Havana, Cuba, in December, 1899, where 11 persons had been baptized and the Sunday school had an attendance of from 20 to 45. The report of the Board of Church Extension began with a reference to the fact that the last three national conventions had recommended efforts to make the fund for that work

\$250,000 by the close of the year 1900. The fund had now actually reached \$252,129, more than realizing the hope implied in the recommendation. The new receipts of the year, including interest, had been \$57,119, exceeding those of the previous year by \$9,454; further, \$23,997 had been collected on loans, making the total receipts of the board for the year \$81,116, and showing a gain of \$16,833. Sixty loans, aggregating \$50,925, had been closed during the year, and 56 loans, aggregating \$47,900, granted but not closed. From the beginning of the fund 505 churches had been aided, and 166 churches had returned their loans in full, and 339 loans were still outstanding. The annuity fund had received \$18,050 during the year, and amounted now to \$36,251. Bequests amounting to \$6,621 had been received. Two new-named loan funds had been founded, making the whole number of such funds (of \$5,000 each) 9.

The Conference of the Churches of Christ in Great Britain and Ireland met at Mount Pleasant, Liverpool, July 31. Mr. David Drummond, of Glasgow, presided. One hundred and seventy-three churches, having 12,000 members, were represented. Reports were made on missions and Sunday schools.

E

EAST AFRICA. The strip of coast over which the Sultan of Zanzibar formerly exercised sovereign rights was leased by him to Germany, Great Britain, and Italy, and by agreements made by these three powers among themselves the whole Hinterland has been divided between them. German East Africa, embracing about 380,000 square miles with a population officially estimated at over 6,000,000, is divided from the Portuguese colony of Mozambique on the south by the river Rovuma, from British Central Africa on the southwest by Lake Nyasa and a line from the northern end of this lake to the southern end of Lake Tanganyika, from the Independent State of the Congo on the west by Lake Tanganyika and a conventional line drawn from its northern end, and from British East Africa on the north by a conventional boundary starting from the extremity of that line in 1° of south longitude, running due east to Victoria Nyanza, and from its eastern shore running south-eastward to the Umbe river and the sea, with a deflection that leaves Kilimanjaro in German territory. The British protectorate of East Africa extends northward from this boundary to the line agreed with Italy in 1891, which is 6° of north latitude from 35° of east longitude eastward to the Juba river, and the course of that river down to the Indian Ocean, the boundary on the west being the agreed boundary of the Congo State, which is the water parting between the Congo and the Nile. To the northwest of the protectorate the basin of the Nile as far north as 10° of north latitude, formerly subject to Egypt, is claimed as a British sphere of influence, and the Egyptian Soudan farther north is under an Anglo-Egyptian condominium. British East Africa includes the territory acquired from the Sultan of Zanzibar and its back country as far as the Victoria Nyanza, the country formerly administered by the British East Africa Company, having an estimated area of 270,000 square miles, with 5,000,000 inhabitants, and the native kingdom of Uganda, the conquest of which exhausted the resources of that company, having an area of about 58,000 square miles and 1,000,000 inhabitants; also the islands forming the sultanate of Zanzibar, which have an area of 988

square miles and 210,000 inhabitants. The northern limit separating the British from what was recognized as the Italian sphere is no longer respected since Italy resigned to Abyssinia her claim to Gallaland and other countries of the interior, and the boundaries separating both the British sphere and the Egyptian Soudan from Abyssinia are indefinite. The Italian sphere in East Africa is now restricted to the Gonaali coast from Cap Guardafui southward to the Juba river, which has an area of about 100,000 square miles and a population estimated at 400,000. British Somaliland extends westward from the Italian sphere along the shore of the Gulf of Aden, and is 68,000 square miles in extent. At the head of the gulf between British Somaliland and the Italian colony of Eritrea, bounded on the west by Abyssinia proper, is French Somaliland. Beyond the boundary of the Italian sphere, which has a breadth of about 150 miles, according to the treaty of peace made between Italy and Abyssinia in 1896, the British have endeavored to extend their East Africa protectorate northward by successive expeditions into the countries over which the Negus of Abyssinia holds an uncertain and precarious dominion, and the Negus, aided unofficially by the French and the Russians, has sent counter-expeditions to establish his rule southward as far as the shores of Lake Rudolf and westward toward the banks of the Nile, laying claim to wide regions that in the Anglo-Italian agreement were recognized as lying within the British and the Egyptian spheres. British military explorers have made treaties with native chiefs west of Uganda as far as the shores of Albert Nyanza, and with Somali and other tribes northeast of Uganda, and have sought commercial access to the Galla country. The total extent of the British sphere is asserted to be over 1,000,000 square miles.

Zanzibar.—The Seyyid, or Sultan, Hamud bin Mohammed bin Said, born in 1858, is still the nominal ruler of Zanzibar, though not only the political control but the civil administration has passed to the British agent and consul general Sir Arthur H. Hardinge at present, whose sanction is necessary for any new law or decree and for

the expenditure of the public revenue, while the Sultan has the function of administering the existing Mohammedan laws under the control of the British agent, who receives his instructions from the Foreign Office in London. The Seyyid now reigning owes his throne to the British, who set aside the claimant favored by the Arab population. He receives an allowance out of the revenue of 10,000 rupees a year, and all the rest is devoted to the police, about 900 men under an English officer, the harbor works and other public improvements, and the general purposes of government. The port of Zanzibar, which has about 30,000 inhabitants, is the chief distributing point for the trade of all East Africa, and it is mostly in the hands of East Indians, whose connections are in Bombay and who for centuries have been the principal merchants of East Africa. There are about 100 of these Banyan traders in Zanzibar. The landowners are Arabs who have clove plantations in Pemba, and who grow rice, copra, and other products in Zanzibar and on the mainland and deal in ivory, rubber, and sometimes slaves. The imports of Zanzibar in 1898 amounted to £1,507,070 and the exports to £1,497,883. These figures include not only the foreign trade, but that between the port of Zanzibar and the other ports of the sultanate. Imports of cloves were valued at £158,507 and exports at £143,730; imports of rice at £197,160 and exports at £147,320; imports of cotton cloth at £376,966 and exports at £361,875; imports of ivory at £113,164 and exports at £112,114; imports of coal at £32,801; imports of copra at £59,315 and exports at £105,114; imports of cereals at £58,006; imports of rubber at £30,853 and exports at £34,622. The trade was divided among different countries as follows:

COUNTRIES.	Imports.	Exports.
German East Africa	£214,100	£476,680
British India	467,852	140,934
Zanzibar and Pemba	217,343	158,880
British East Africa	59,544	202,591
Great Britain	121,211	114,716
France	26,631	114,417
Germany	93,516	41,141
America	78,991	57,092

The year 1898 was one of great prosperity, resulting from an enormous clove crop, which reached 1,000,000 pounds, and the money put into circulation by the building and opening of the railroad from Mombasa. This was followed by a year of dearth caused by the Boer war and the failure of crops. Countries that usually export grain became buyers at famine rates. The clove crop was only 65,000 pounds—the smallest on record. The heavy export that increased was hides, for cattle could not be fed, and died or were killed, the largest quantity of the hides and of goatskins going to the United States. The supply of ivory does not diminish, although the elephants are being killed off. It is kept up by the finding of herds and by pushing the caravans farther and each year. Imports from the United States are gray sheetings and shirtings and kerosene. The number of vessels entered at the port of Zanzibar during 1898, excluding coasting vessels, was 183, of 286,209 tons. The unit of value is the Maria Theresa dollar, though the Indian rupee is universally current at the exchange value of 47 pence. Justice between the Sultan's subjects is administered by the Mohammedan *kazis*. Civil cases are usually brought before the British court, in which an appeal lies to the High Court of Bombay. There is an admiralty court which condemns captured slave dhows. The British court

has jurisdiction over slaves freed by the British agent, but usually if a slave wants freedom he must go before a *kazi*. The legal status of slavery was abolished by the decree of April 6, 1897. Many were emancipated in the beginning, and then there was a pause, due mainly to the interpretation put by the British authorities on a clause of the emancipation decree which says that any person whose right to freedom may have been formally recognized is bound to show that he possesses a regular domicile and means of subsistence on pain of being declared a vagrant. Slaves who applied to the British authorities for emancipation were refused unless the owner or some other responsible person undertook to give them land and to be responsible for their future. Under this interpretation a slave to obtain freedom must leave his master's *shamba*, running the risk of arrest for vagrancy while endeavoring to find an employer. None will employ him until he has obtained his certificate of freedom, and this the courts will not grant unless the prospective employer will appear or send a letter guaranteeing his future good behavior. The Foreign Office in London has repudiated the interpretation put upon the emancipation by the local authorities. However slow the progress of emancipation, the decree has altered the position of the slave, who is now paid for his labor the same as a freeman.

British East Africa Protectorate.—The country between the Juba and the Uмба rivers and the border of Uganda and the sea was proclaimed a British protectorate on Aug. 31, 1896, and placed under the control of the Foreign Office, with the British agent and consul general at Zanzibar as head of the administration. It is divided into the administrative divisions of the coast province, called the Seyyiddieh, Ukamba, Tanaland, which includes Witu and Jubaland. The estimated population of 2,500,000 includes 25,000 Asiatics and 450 Europeans and Eurasians. Mombasa, the capital of the protectorate and the sea terminus of the Uganda Railroad, has two good harbors, which are being improved by the construction of jetties and wharves. Its present population is about 30,000. Lines of telegraph and a submarine cable connect it with Lamu and Zanzibar, the land lines having a length of 140 miles. The revenue in 1898 was £43,841, and in 1899 was £50,000. The imports in 1898 were 4,464,827 rupees in value, and in 1899 they amounted to 7,025,000 rupees. The exports in 1898 were valued at 1,087,266 rupees, and in 1899 at 1,067,000 rupees. The tonnage entered in 1898 was 196,630 tons, and in 1899 it was 321,480 tons. A duty of 5 per cent. is levied at the ports under the Brussels act. The principal exports are ivory, rubber, cattle, goats, hides and horns, copra, grain, and gum copal. Cotton cloth is imported from Bombay and Manchester, and recently American cloth also. Provisions are imported, and beads and brass wire for trade. The Banyan merchants have control of the trade. Mangrove timber is brought for building purposes from other parts of the coast. A severe drought in 1898 and 1899 caused a general famine. The highlands in the interior are believed to be well adapted to cattle growing by Europeans. The Massai tribes formerly rendered the country dangerous to live or travel in, but punitive measures have taught them to respect British authority.

The Uganda Railroad has cost already more than the original estimate, and the final cost is more problematical than it seemed when that estimate was made because the route has not yet been accurately surveyed. The British Government having undertaken the work, Parliament will supply the money to complete it, and before 1903 it will

probably reach the shore of Victoria Nyanza. Parliament in 1896 voted £3,000,000, the sum then deemed sufficient, and in 1900 the additional contribution of £2,000,000 was voted by a large majority without any assurance that the larger sum will not be exceeded, for both parties in England are committed to the project. Instead of a light, unballasted line, with temporary timber bridges to be replaced with iron ones after the line was in operation, it was found necessary to ballast the line throughout and to build more substantial bridges than the surveyors planned who went over the country in the dry season. The expectation that the tribes would furnish the labor at the current rate of 4d. or 6d. a day was disappointed. Out of 16,000 laborers, only 2,000 were found in the country, and 14,000 were brought from India, costing 14d. a day. The original estimate of cost was £3,000 a mile, and after a good part of the railroad had been laid and it was found that it had to be rebuilt this was increased to £5,500 a mile. The present estimate is £8,500. Of 580 miles, the total distance from the coast to the lake, 362 miles were completed and open to traffic in the spring of 1900. The estimates of the future profitability of the line have all been discarded since the estimates of cost and running expenses have been doubled. The present traffic affords no basis for calculation, consisting as it does to a large extent in taking supplies up for the coolie workmen. The full equipment for the line has been already provided. American locomotives are used, and have been found satisfactory. Even the water for the boilers must be brought from Mombasa, because the river water of the interior is corrosive. Jetties have been built at the terminus on the lake, and when the railroad is completed the Government will probably have to provide the steamboat service. The prospect of profitable private enterprises dwindles with a better knowledge of the conditions of the country. The railroad will be carried out as an imperial undertaking, with the object of consolidating British power and influence in Africa and extending civilization. Already as far as the railroad has been opened, the slave trade and cannibalism are believed to have died out. Whatever chance there is of securing a paying traffic for a long time to come lies in the hope of diverting the trade that now passes through German East Africa and the Congo State. If this can be drawn to the new railroad Mombasa will supplant Zanzibar as the chief port of East Africa.

After the decree was issued abolishing the legal status of slavery in the islands of Zanzibar and Pemba Mr. Balfour pledged the Government to take similar steps on the 10-mile strip of the mainland where British sovereignty succeeded that of the Sultan of Zanzibar. On this coast strip the Arab planters have about 200,000 slaves. In the rest of the protectorate slavery is not recognized by law, and slaves within the coast strip can obtain their freedom by running away over the border. In February, 1899, Mr. Brodrick renewed Mr. Balfour's pledge, and said that the Government hoped to extend to the mainland the process carried out in the islands at the earliest opportunity; but in February, 1900, he said that the reason the Government had not and could not interfere with the status of slavery was due to an undertaking given when the British administration was proclaimed. This undertaking was contained in a speech of Sir Lloyd Matthews, who told the Arabs at Mombasa, on July 1, 1895, that all affairs connected with the faith of Islam would be conducted to the honor and benefit of religion, and all ancient customs would be allowed to continue, and the wish of the head of the new administra-

tion, the consul general at Zanzibar, who would issue all orders under the sovereignty of the Sultan, was that everything should be done in accordance with justice and law.

Uganda.—A British protectorate was declared over the kingdom of Uganda on June 19, 1894, by the British East Africa Company, which attempted to establish a control over the administration of the country in 1892, having withdrawn in March, 1893, in consequence of a war with the natives which was brought to a conclusion by Indian troops under British officers. The protectorate was extended in July, 1896, so as to take in Unyoro and other newly conquered countries to the westward of Uganda as far as the boundary of the Congo State, as well as Usoga on the east. The infant son of King Mwanga was proclaimed King of Uganda after the suppression of the rebellion, and regents were appointed to act in his name, but the actual administration was assumed wholly by the British commissioner, who has a force of 300 Indian troops and 2,000 Soudanese under British officers to uphold his authority. The British fort of Kampala is close to the native capital, Mengo. The seat of administration is Port Alice on Victoria Nyanza. A chain of forts extends along the borders of Uganda, and these are garrisoned by Soudanese soldiers, who live there with their large families and cultivate land for themselves while overawing the people of Unyoro and the other neighboring countries and thus securing respect for British dominion. Owing to the great extent of high table-land Uganda is believed to be as healthful for Europeans as the best parts of north or south Africa. The plateau extends 300 miles in a northwesterly direction and has an average width of 100 miles. The only markedly unhealthy places are the banks of the Nile and the shores of Victoria Nyanza. The total population within the limits of the protectorate is estimated at 4,000,000, which is considerably less than the former population, civil wars, invasions, and famines having brought about a decrease in recent years. The Baganda are of all the races inhabiting this region the most capable of a high state of civilization, toward which they have already made much progress. Sir Harry H. Johnston, special commissioner, proposes to raise a local revenue by imposing a hut tax of 4s., which should bring in an annual income of £160,000. A license tax for the privilege of shooting elephants would increase the revenue and have a good effect in restricting the slaughter of elephants. The banana is the principal food of the people, and they can grow it so easily that there is little incentive to industry. The soil is capable of producing many food crops and commercial products and would amply repay better cultivation. It is said to be especially suitable for growing coffee. Such trade as there is in the country is in the hands of German firms, owing to the fact that portage in German East Africa is far cheaper and better organized than on the routes through British territory. When the Uganda Railroad is completed the conditions of transportation will be changed, and it is expected that British trade will reap the benefit. By an arrangement made by Sir H. Johnston with the regents and chiefs of the kingdom of Uganda, the King receives a stated allowance from the Government, and salaries are paid to the *Katekero*, or Prime Minister, the *Chiefs of Justice*, and the Treasurer of the King's revenue. A new native council has been appointed and a definite system of taxation was drawn up, which includes the proposed hut and gun taxes. Although the new taxes are heavier than those hitherto in force, the chiefs raised no serious

tions to the proposed changes. Some commerce has been developed since the end of the last internal disturbance, the mutiny of Soudanese troops, who were chased out of the country in the spring of 1899. The articles of export are wild coffee, ivory, cattle, and rubber. The inhabitants, three-fourths of whom are of Bantu stock, are expert working iron, making pottery, and other native crafts. The revenue raised locally is about £23,000 a year. Church of England missionaries are very active among the natives, and two Roman Catholic missionary societies have long been at work in Zanzibar.

German East Africa.—The German protectorate is under the administration of an imperial governor, at present Major-Gen. Liebert, residing at Dar-es-Salam. The population consists of tribes of mixed Bantu race, with a strong admixture of Arab and Indian blood near the coast. The European residents on July 1, 1899, numbered 1,090, of whom 881 were Germans, 38 English, and 34 Swedes. There are 7 Protestant and 3 Roman Catholic missionary societies working among the natives. The military force in 1899 consisted of 8 Germans and 1,572 colored troops, besides a military police numbering 15 Germans and 482 Swahis. The Government has several experimental stations to test methods of tropical agriculture and the breeding of animals. A scientific investigation of the forests has been begun. Near the coast the forests contain mangroves, coconut palms, baobabs, and tamarind trees, and those of the higher lands in the interior consist of the acacia, cotton tree, sycamore, banyan, and many other species. The minerals already discovered include iron, coal, malachite, and salt. Gold is known to exist, whether in paying quantities it is not been determined. German planters raise coconuts, vanilla, tobacco, rubber, and cacao in the coast region, and on higher ground coffee. They have displayed great enterprise in these undertakings, looking far ahead for the profits of their investments, and some are already obtaining satisfactory results. The authorities are trying to make a thorough system of roads throughout the protectorate. Mules have been introduced as transport animals because they resist the tsetse fly better than horses or asses. The native planters have large groves of banana trees and cultivate rice and pulse. Their common domestic animal is the goat, though cattle and sheep are also reared. The chief seaports are Dar-es-Salam and Bagamoyo, with about 13,000 inhabitants each; Saadani, Pangani, and Kilwa, with 10,000; and Lindi, Mikindani, and Tanga, with 5,000. Their harbors are too shallow for large ocean steamers, and therefore the trade centers in Zanzibar, as it has been for centuries. Indian merchants carry on a great part of the commerce of the German as well as of the English possessions, and they complain of the unfairness of German taxation, not appreciating that the attention given by the German authorities to police, navigation, industry, commerce, agriculture, roads, transport, schools, and public health enables them to carry on a larger, safer, and more profitable trade than they did before the advent of the German administration. The imports and exports increase year by year. In 1898 imports amounted to 16,852,656 marks and exports to 95,929 marks. Cotton goods amount to nearly half the imports, foodstuffs coming next. The main exports are ivory, rubber, copra, gum copal, palm, and coffee. Ivory is decreasing, as Congo ivory goes now to the west coast, and that from Zanzibar is exported through Mombasa. The German authorities take elaborate measures to counteract the effects of the climate, including sub-

stantial stone houses, hospitals, an ample medical staff, inspection of meat, covered wells, vaccination, inspection of native houses in the towns, drainage, and a study of the blackwater fever and other endemic diseases by medical investigators. Steps have been taken to check the spread of Texas fever among cattle. The smallpox has caused great mortality among the natives, and the plague and leprosy have appeared. The drought which occurred in the winter of 1898 brought the people to the verge of famine, and their distress was prolonged by the ravages of locusts. The revenue for 1900 amounted to 8,495,000 marks, including the imperial contribution of 5,985,000 marks. A hut tax was introduced which yielded 300,000 marks where only 100,000 marks were expected. For 1901 the imperial contribution was fixed at 6,830,000 marks. The Government encourages the building of railroads by granting subsidies, which are given also to steamship companies. A railroad from Tanga, of which 10 miles were completed in 1899, is being built to Karagwe and Nomba, and one from Dar-es-Salam to Norogo. A telegraph line is being built from Dar-es-Salam to Kilossa. The coast stations are connected with one another by telegraph and with Zanzibar by a cable.

ECUADOR, a republic in South America. The Constitution, amended last in 1897, vests the legislative power in the Congress, consisting of a Senate of 32 members, 2 from each province, elected for two years, and a House of Representatives containing at present 33 members, 1 for every 15,000 of population, elected likewise for two years by the suffrage of all adult male citizens who can read and write. The President is elected for four years by direct vote of the people, and the Vice-President, who in certain cases is called upon to act as President, is elected in the same manner after an interval of two years. The President elected for the term beginning Feb. 6, 1897, is Gen. Eloy Alfaro. The Vice-President is Freila Zaldumbide. The Cabinet at the beginning of 1900 was composed as follows: President *ex-officio*, Vice-President Zaldumbide; Minister of the Interior, Police, Public Works, Agriculture, and Public Charity, Gomez de la Torre; Minister of Foreign Affairs and Justice, José Peralta; Minister of War and Marine, Gen. Nicolo Arellano; Minister of Finance, Public Instruction, and Immigration, Abelardo Monscayo.

Area and Population.—The area of Ecuador is about 120,000 square miles. The Peruvian boundary has not been determined, and the treaty arranged on May 2, 1890, having been altered by the Peruvian Government in 1893, was revoked altogether by the Ecuadorian Congress in the following year. Ecuador also disputes with Colombia the territories on the left bank of the Napo river. The population of the republic is 1,271,861, of whom about 100,000 are whites of Spanish descent, 300,000 are of mixed race, and the rest are Indians. Quito, the capital, has about 80,000 inhabitants; Guayaquil, the seaport, 50,000. Public education is provided free and is compulsory. There are 9 superior, 35 intermediate, and 1,088 primary schools, with 1,498 teachers and 68,380 pupils.

Finances.—The revenue for 1897 was 6,760,545 sucres, of which 5,358,629 sucres came from customs, and the expenditure was 5,690,220 sucres. The estimate of revenue for that year and for 1898 was 9,093,551 sucres, and that of expenditure at 11,005,141 sucres, and the same estimates were officially adopted for 1899, except that military and naval appropriations were omitted, reducing the expenditure to about 7,000,000 sucres. The foreign debt of Ecuador was inherited from the

original republic of Colombia when it split up in 1830. This debt, originally £1,824,000 in amount, has been at different times repudiated and recognized, and various compromises have been made with the bondholders. The arrangement of 1892, reducing the capital to £750,000, was revised in 1895, and in the following year payments were again suspended and negotiations were begun for one more advantageous. The bonds outstanding in 1899 amounted to £693,160. Arrangements were completed in 1900 for the redemption of these bonds by the Guayaquil and Quito Railroad Company, which assumes the debt and agrees to redeem at par the outstanding bonds, reduced to £500,000, issuing \$1,014,000 of its own bonds to be given in exchange for part and applying to the payment of others in half-yearly drawings an extraordinary sinking fund of £12,500 per annum, while for the amortization of another part is provided the ordinary sinking fund of \$5,070 per annum.

The internal debt in 1897 amounted to 7,500,000 sucres. The notes of the two banks of issue, 5,660,000 sucres on Jan. 1, 1899, are protected by gold and silver reserves considerably above the legal requirement of one third. A law of 1897 provides that half the reserve shall be in gold, and in 1898 a law was passed for the establishment of the gold standard in 1901 and the redemption of 2,000,000 sucres at their nominal value. This is about two thirds of the silver coin in circulation, about the proportion that is held by the banks in their metallic reserves. The gold condor, the unit of the new coinage, will contain the same quantity of gold as the English sovereign and will exchange for 10 silver sucres.

Commerce and Production.—The chief exportable product is cacao, which is grown in the coast districts, where there are 47,200,000 trees. The export of cacao from Guayaquil in 1898 was 425,883 quintals, against 331,045 quintals in 1897. The export of coffee was 26,126 quintals in 1897 and 28,157 quintals in 1898. Of sugar 15,300 quintals were exported in 1898. The export of ivory nuts was 115,400 quintals. Other commercial products are rubber, cotton, hides, Panama hats, cinchona, orchilla, and sarsaparilla. Gold is obtained by crushing at Oro and by hydraulic machinery from the gravel at Esmeraldas. Indians wash gold from the beds of many streams. Silver is mined in Cañan province, and in other parts of the country copper, lead, iron, and coal are present in quantities, and also petroleum. The total value of the imports in 1897 was 18,004,048 sucres, and the value of the exports was stated by the President to have been 31,025,382 sucres.

Navigation.—The number of vessels entered at the port of Guayaquil during 1898 was 206, of 298,805 tons; cleared, 200, of 290,855 tons. About 45 per cent. of the vessels and of the tonnage is British.

Railroads and Telegraphs.—An American company acquired the railroad from Duran, opposite Guayaquil, to Chimbo, 58 miles, and signed a contract on June 14, 1897, to rebuild this section, changing it to the standard gauge, and to continue it 292 miles to Quito. The route passes through a productive region where coffee, cacao, and sugar cane are grown. Work was begun in May, 1899. There are 1,242 miles of telegraph connecting Quito with Guayaquil and with Colombian ports and the ocean cable.

EGYPT, a principality in northern Africa, tributary to Turkey, and under the military occupation and political and financial control of Great Britain. The Government is an absolute monarchy of the Mohammedan type, though the

throne passes by the European law of primogeniture, and the Khedive, or Viceroy, is advised by a Council of Ministers. The reigning Khedive is Abbas Hilmi, born July 14, 1874, who succeeded his father, Mehemet Tewfik, on Jan. 7, 1892. The British occupation has lasted since the suppression of the military revolt led by Arabi Pasha in 1882, and since Jan. 18, 1883, an English financial adviser has possessed the right of veto over financial measures, and has generally exercised a decisive voice in all important measures, imposing such as he and his Government consider expedient and desirable, and preventing the enactment of others that they disapprove. A conference of representatives of the powers that was held at Constantinople to consider the situation caused by the bankruptcy of the Egyptian treasury dissolved when England, after the signature of a self-denying protocol, intervened single-handed in Egypt, and France, having refused to join in the intervention, was excluded from the dual control, leaving England alone in control of the finances. The assurance was given at that time that Great Britain would evacuate Egypt as soon as Egypt should be able to maintain a firm and orderly government, and this pledge was afterward reiterated by successive governments in England.

The Cabinet of the Khedive, constituted on April 16, 1894, consisted in the beginning of 1900 of the following members: President of the Council and Minister of the Interior, Mustapha Fehmi Pasha; Minister of War and Marine, Mohammed Abani Pasha; Minister of Public Works and of Education, Hussein Fakhry Pasha; Minister of Foreign Affairs, Butros Ghali Pasha; Minister of Finance, Ahmet Mazlum Pasha; Minister of Justice, Ibrahim Fuad Pasha. The British diplomatic agent is Viscount Cromer; financial adviser, J. L. Gorst; commander in chief of the army of occupation, Major-Gen. R. A. J. Talbot.

Area and Population.—Egypt proper has a total area of about 400,000 square miles, of which only 12,976 square miles, comprising the narrow valley of the Nile and the delta, are fertile and inhabited by a settled population. The census of June 1, 1897, makes the total population 9,734,405, of whom 9,047,905 are sedentary Egyptians, 573,974 nomads, and 112,574 foreigners. Of the Egyptian population 3,198,524, including 1,585,826 females, were under ten years of age, and 6,423,307, including 3,152,404 females, were above that age. Of the total number above that age 142,089 males and 3,088,673 females had no declared occupation; 2,049,258 males were employed in agriculture; 532,322 males and 21,496 females were engaged in industries and trades; 184,096 males were laborers and 61,577 clerks, and 4,801 females followed one or the other of these occupations; 4,072 males and 2,553 females depended on the liberal professions; 156,623 males and 2,218 females were engaged in religion and instruction, including 2,171 Christian ecclesiastics and Jewish rabbis, 113,438 readers of the Koran, 4,934 school-teachers, and 40,441 pupils above ten years of age; 29,201 males were in the public force; and 111,665 males and 32,663 females were domestics. Of the foreign population 21,632, comprising 10,976 males and 10,656 females, were under and 90,942, comprising 53,273 males and 37,669 females, were over ten years of age. Of the latter total 385 males were agriculturists, 25,494 males and 2,371 females in industrial pursuits and trades, 1,172 males laborers and 6,031 clerks, and also 148 females, 1,959 males and 189 females in liberal professions, 4,361 males and 2,049 females in religious or educational calling, 6,850 males in the public force, and 1,712 males and 2,683 females domestics, while 5,309 males and 30,229 females

ere without stated occupation. Only 5.8 per cent. of the sedentary population over seven years of age could read and write, in lower Egypt 7.02 per cent., and in upper Egypt 4.07 per cent. Of the foreign population 74 per cent. could read and write. There were 107 Government, national, and *mak* schools, with 789 teachers and 10,859 pupils, on Dec. 31, 1898; 187 mission schools, with 792 teachers and 20,089 pupils; and 9,703 other schools, with 14,590 teachers and 180,573 pupils. The European schools number 43, with 285 teachers and 4,869 pupils, besides 34 schools for girls, with 170 teachers and 3,345 pupils. In the Government schools the pupils are obliged to learn foreign language, either French or English, whichever their parents or guardians select. French is being gradually displaced by English, which was taken by 78 per cent. of the pupils in 1899, and French by only 22 per cent. The population of Egypt in 1897 was divided as to religion to 8,978,775 Mussulmans, 608,446 Copts, 56,343 Roman Catholics, 53,479 Greek Orthodox, 25,200 Jews, 11,894 Protestants, and 268 undeclared—Mussulmans thus forming 92.23 per cent., Christians 7.5 per cent., and Jews 0.26 per cent. of the total.

Finances.—The revenue in 1899 amounted to £ E. 11,415,000, and expenditure to £ E. 10,254,000, leaving a surplus of £ E. 1,161,000, of which £ E. 759,000 were paid into the economies fund and £ E. 402,000 were left at the disposal of the government. The budget estimate of revenue for 1900 was £ E. 10,380,000, of which the land tax produces £ E. 4,423,000, various direct taxes £ E. 137,000, the tobacco monopoly £ E. 1,000,000, customs £ E. 900,000, *octrois* and salt £ E. 400,000, various indirect taxes £ E. 193,000, railroads and telegraphs £ E. 1,877,000, port dues £ E. 152,400, the post office £ E. 125,000, various services £ E. 81,000, law courts £ E. 562,000, military service exemption £ E. 100,000, various other surces £ E. 214,000, and £ E. 215,000 is taken from the reserve fund. The expenditure for 1900 as estimated in the budget at £ E. 10,380,000, of which £ E. 4,366,018 were required for the consolidated debt, £ E. 301,358 for various other debts, £ E. 417,179 to cover the Soudan deficit, £ E. 665,041 for the Turkish tribute, £ E. 437,000 for pensions, £ E. 253,861 for the civil list, £ E. 12,578 for the Ministerial and Legislative Councils, £ E. 1,764,927 for the ministries, £ E. 298,837 for provincial administration, £ E. 204,743 for cost of collection, £ E. 959,412 for railroads and telegraphs, £ E. 36,165 for the ports, £ E. 108,159 for the post office, £ E. 30,327 for various services, £ E. 439,570 for the Egyptian army, and £ E. 84,825 for the army of occupation.

The foreign debt of Egypt had its inception in the issue of £4,292,800 sterling of bonds in 1862 by Ismail Pasha to extinguish floating obligations that he had incurred in carrying out schemes for irrigation, the reclamation of lands, the establishment of sugar factories, the extension of cotton cultivation, and various other public and economic improvements. Other loans followed in quick succession, as the enterprises were extended with feverish haste during the American civil war, when Egyptian cotton brought an enormous price.reckless extravagance and official corruption consumed a great deal of the money that Ismail obtained, which through mismanagement of the public credit and the machinations of the European houses that financed the operations was only a part of the nominal amount of the obligations. The amount of the foreign loans had risen to £38,307,000 in 1870, and in 1873 a new loan of

£32,000,000 was raised to pay off £28,000,000 of floating debt. In 1875 the Khedive became embarrassed, and a decree was issued to consolidate the debts into one of £91,000,000. When he was unable to pay the interest on a part of the bonds in 1877 an arrangement was made with the English and French bondholders to issue a preference loan of £17,000,000 paying 5 per cent. and a unified loan of £59,000,000 paying 7 per cent. in lieu of the outstanding bonds. The separate loans secured on the Khedive's Daira estates were converted at the time into the Daira Sanieh debt of £8,815,430, paying 5 per cent. In 1878 bonds were issued for £8,500,000 at 5 per cent., with the khedivial estates as security, and a commission was appointed to administer the estates. In the following year the dual control of the public finances by France and Great Britain was instituted. The Comptroller General announced in 1880 that Egypt could not meet the obligations in full, and after examination by a commission appointed by the great powers, and on the recommendation of that commission, a liquidation law was promulgated reducing the interest of the unified debt to 4 per cent., the amount of this debt being in preference debt to £22,743,800, and that of the Daira Sanieh debt, the interest of which was fixed at 4 per cent., to £9,512,880. In 1885 a new loan of £9,424,000 was contracted, the capital and interest at 3 per cent. guaranteed by the great powers. A loan of £2,330,000 was contracted at 4½ per cent. in 1888, and in 1890 this was consolidated with the preference debt into a new preference loan of the nominal amount of £29,400,000, bearing 3 per cent. interest, £ E. 1,300,000 being borrowed in connection with the operation for irrigation works and the commutation of pensions. The Daira Sanieh debt was converted at this time into new bonds for £7,299,360, paying 4 per cent. In 1893 the domain bonds were converted into new ones for £8,500,000, paying 4½ per cent. In the beginning of 1899 the guaranteed 3-per-cent. loan amounted to £8,558,100, the annual charge for interest and sinking fund being £256,743; privileged 3½-per-cent. bonds, £29,393,580, with an annual charge of £1,028,775; unified 4-per-cent. bonds, £55,971,960, with an annual charge of £2,238,378; Daira Sanieh 4-per-cent. bonds, £55,971,960, with an annual charge of £2,238,378; domains 4½-per-cent. bonds, £3,214,440, with an annual charge of £149,124; total debt, £103,444,580, of which £7,048,000 was held by the commissioners of the debt; total annual charge, £3,930,280. On Dec. 31, 1899, the total amount of the debt was £103,049,000, including £7,494,000 held by the commissioners of the debt, leaving £95,555,000 in the hands of the bondholders. The interest charge was £3,862,000. Reserve funds were established in 1887 which amounted on Jan. 1, 1899, to £ E. 7,111,032, made up of a fund from economies made by conversions amounting to £ E. 3,617,000 and a general reserve fund of £ E. 3,893,134. A special reserve fund was depleted by extraordinary expenditure entailed by the reconquest of the Soudan, and at the beginning of 1899 showed a deficit of £ E. 92,439, but on Jan. 1, 1900, there was a credit balance of £ E. 243,000. The general fund on Jan. 1, 1900, stood at £ E. 3,523,000, but of this £ E. 2,182,000 were pledged to expenditure of various descriptions, leaving an unpledged balance of £ E. 1,341,000.

The Army.—The Egyptian army, trained and commanded by about 100 British officers, with Col. Sir Reginald Wingate in supreme command with the title of sirdar, has a total strength of 18,395 men, with 1,610 horses and mules, 1,700 camels,

and 150 field guns. The British army of occupation, which has remained in Egypt since 1882, has a present strength of 5,553 men.

Commerce and Production.—The production of cotton in 1899 was 5,888,816 kantars of 99 pounds, compared with 6,543,128 kantars in 1898 and 5,879,750 kantars in 1897. The area under cotton in 1899 was 906,000 acres; under sugar cane, 67,120 acres; under wheat, 1,262,000 acres; under maize, 1,592,000 acres. The total value of merchandise imports in 1899 was £ E. 11,216,405, against £ E. 11,033,219 in 1898; value of exports, £ E. 15,351,908, against £ E. 11,805,179. The specie imports were £ E. 4,515,917 in 1899, against £ E. 2,730,116 in 1898; exports of specie, £ E. 1,502,485, against £ E. 1,891,513. The imports of animals and animal food products in 1899 were £ E. 389,243, against £ E. 389,011 in 1898; exports, £ E. 69,556, against £ E. 59,585; imports of skins and leather manufactures, £ E. 166,588, against £ E. 179,287; exports, £ E. 68,666, against £ E. 79,005; imports of other animal products, £ E. 64,953, against £ E. 66,763; exports, £ E. 40,050, against £ E. 38,797; imports of cereals and vegetables, £ E. 1,021,507, against £ E. 1,273,212; exports, £ E. 2,670,098, against £ E. 2,422,449; imports of provisions and drugs, £ E. 321,481, against £ E. 284,021; exports, £ E. 702,588, against £ E. 556,667; imports of spirits and oils, £ E. 626,864, against £ E. 649,699; exports, £ E. 15,397, against £ E. 21,104; imports of rags, paper, and books, £ E. 164,934, against £ E. 145,074; exports, £ E. 15,521, against £ E. 17,854; imports of coal, wood, and manufactures of wood, £ E. 1,771,750, against £ E. 1,178,953; exports, £ E. 18,791, against £ E. 21,839; imports of glass, stone, lime, etc., £ E. 331,018, against £ E. 240,031; exports, £ E. 1,388, against £ E. 1,280; imports of dyes, etc., £ E. 240,059, against £ E. 254,247; exports, £ E. 18,443, against £ E. 16,533; imports of chemicals, £ E. 267,433, against £ E. 224,552; exports, £ E. 19,287, against £ E. 18,400; imports of textiles, mainly cotton, £ E. 3,332,213, against £ E. 3,289,274; exports, £ E. 11,669,337, against £ E. 8,512,867; imports of metals and metal manufactures, £ E. 1,607,614, against £ E. 1,423,760; exports, £ E. 18,159, against £ E. 13,975; imports of tobacco, £ E. 532,984, against £ E. 539,629; imports of miscellaneous articles, £ E. 337,795, against £ E. 596,255; exports, £ E. 15,213, against £ E. 24,824. Of the total imports in 1899 the value of £ E. 9,945,165, and of the exports £ E. 15,068,722, passed through the port of Alexandria.

The distribution of the commerce is shown in the table below.

A national bank that was established in 1898 made advances as an experiment to fellahin of

a number of villages at 10 per cent. per annum enable them to pay money lenders who charge 20 per cent. or more. The result was satisfactory and all the loans were repaid before the end of the year. The incidence of the land tax has been very unequal, but the Government decided to postpone the consideration of the subject until British officials become familiar with local conditions. The first steps toward equalization were taken in 1895, and since then substantial progress has been made toward a reassessment. Progress has been made also in reforming the administration of the Wakfs, or charitable and religious trusts, precautions being taken that there shall be no infringement of the law of Islam. In 1898 there was an unprecedentedly low Nile, and while this caused a shortage of crops it facilitated the construction of the Nile reservoirs, which were pushed on with great rapidity. Drainage works that have been carried out in lower Egypt have been successful. The great dam at Assouan, 13 feet high and 80 feet broad at bottom, for the storage of the superfluous water that comes down during the five winter months, is expected to raise the water level at the first cataract 50 feet above the present low-water level and to fill a reservoir extending 140 miles southward into Nubia. About 12,000 laborers were employed on the dam in 1899, which is built of granite laid in cement and has a length of 1½ mile. The water will be drawn out of the reservoir through 160 stone sluice gates, each 22 feet high and 7 feet wide.

Navigation.—The number of vessels entered the port of Alexandria during 1898 was 2,454, 2,555,396 tons; cleared, 2,428, of 2,559,876 tons. Of the total number entered 729, of 111,481 tons, and of those cleared 734, of 1,117,161 tons, were British; French vessels entered numbered 125, 263,778 tons, and 126 French vessels, of 265,3 tons, were cleared; 153 Italian vessels, of 281,3 tons, were entered and 153, of 279,426 tons, were cleared; 139 Austrian vessels, of 254,703 tons, were entered and 140, of 261,125 tons, cleared; 8 Turkish vessels, of 151,461 tons, were entered and 95, of 188,971 tons, cleared; of Greek vessels 16 of 66,781 tons, were entered and 155, of 63,755 tons, were cleared; of Swedish and Norwegian vessels 36, of 59,221 tons, were entered and 34, of 57,8 tons, were cleared; of German vessels 27, of 52,2 tons, were entered and 27, of 54,754 tons, cleared; of Egyptian vessels 82, of 85,547 tons, were entered and 79, of 82,566 tons, were cleared; belonging to other countries were 58 vessels, of 4,881 tons, entered and 58, of 41,508 tons, cleared. The number of steamers entered in 1898 was 1,522, in 1899 the number was 1,342. Since the completion of docks, wharves, and quays and the opening in 1894 of a new pass 300 feet wide and

COUNTRIES.	IMPORTS.		EXPORTS.	
	1898.	1899.	1898.	1899.
Great Britain	£ E. 8,872,452	£ E. 4,334,026	£ E. 5,523,204	£ E. 8,257,5
France and Algeria	1,069,532	1,060,341	1,129,302	1,366,
Turkey	1,701,994	1,643,224	390,651	339,
Russia	471,475	430,023	1,869,946	1,253,
America	381,792	234,841	873,368	1,346,
Austria-Hungary	746,050	735,296	413,149	579,
Italy	800,948	555,871	261,379	445,
Germany	316,327	350,204	481,420	578,
British colonies in the East	588,501	611,498	29,741	71,
Belgium	542,704	626,405	30,933	59,
China and far East	83,639	83,484	33,669	91,
Greece	97,673	99,063	13,677	3,
British Mediterranean colonies	103,500	80,206	10,578	7,
Persia	42,092	37,021	.....	2,
Morocco	39,592	30,181	.....	.....
All other countries	525,148	301,762	667,831	96,
Total	£ E. 11,083,219	£ E. 11,216,405	£ E. 11,805,179	£ E. 15,342,

deep, steamers and other vessels of deep draught that formerly were unable to enter the port in rough weather can run in at all times and load and unload without lightering.

Railroads, Posts, and Telegraphs.—The railroads belonging to the state system that were completed and in operation on Jan. 1, 1899, were 160 miles long, besides which were 72 miles of sidings belonging to companies, making a total length of 1,238 miles, of which 825 miles were in the delta and 413 miles in upper Egypt. The Government had in process of construction 290 miles, and companies had 64 miles. Besides these there were 390 miles of agricultural railroads in the Soudan Sanieh estates; neither is the military railroad in the Soudan included. Concessions had been granted for 230 miles of narrow-gauge railroads in the delta. During 1899 there were 209 miles of new standard-gauge railroads opened to traffic, making 430 miles constructed since 1897. The construction of agricultural railroads progresses steadily, and on Jan. 1, 1900, there were 100 miles of these. Locomotives, cars, bridge work, and other material have recently been obtained largely from the United States, where the manufacturers were able to furnish rolling stock more after their own standard designs in less time and at lower prices than British manufacturers could tender. The railroad traffic in 1898 on 1,214 miles completed was 11,312,400 passengers and 16,780 tons of freight; gross receipts, £ E. 2,186,899; working expenses, £ E. 917,536; net receipts, £ E. 1,114,033; equal to 55 per cent. of the gross receipts.

The number of letters and postal cards carried by the mails during 1898 was 14,733,000, of which 1,600,000 were domestic and 2,473,000 foreign; newspapers, 8,040,000, of which 7,100,000 were domestic and 940,000 foreign; parcels, 563,800, of which 274,000 were domestic and 289,800 foreign; postal orders and remittances, 563,800, amounting to £ E. 16,437,000.

The telegraph lines are the property of the Government. On Jan. 1, 1899, they had a total length of 1,105 miles, with 9,364 miles of wire. The number of messages in 1898 was 2,743,788.

The Suez Canal.—The number of vessels that passed through the Suez Canal during 1898 was 1,013, of 12,962,632 tons, of which 2,295, of 8,691, tons, were British; 356, of 1,353,161 tons, German; 221, of 891,642 tons, French; 193, of 1,478 tons, Dutch; 85, of 300,251 tons, Austro-Hungarian; 46, of 261,602 tons, Japanese; 48, of 1,381 tons, Russian; 49, of 232,358 tons, Spanish; 74, of 208,418 tons, Italian; 47, of 109,709 tons, Norwegian; 54, of 83,541 tons, Turkish; 8, of 10,228 tons, Danish; 10, of 15,705 tons, Egyptian; 4, of 6,181 tons, Chinese; 4, of 3,162 tons, American; 2, of 1,941 tons, Greek; 1, of 1,703 tons, Rumanian; 2, of 1,021 tons, Swedish; 3, of 606 tons, Portuguese; and 1, of 451 tons, Argentinian. The receipts for the year were £3,411,791. The number of passengers taken through was 219,671. The share and loan capital of the company amounts to 464,100,827 francs, including about 100,000 francs redeemed. There are besides 1,000 founders' shares which receive dividends on the profits exceed a certain percentage. The profits in 1898 were 48,789,818 francs, of which 18,028 francs were divided among shareholders. The amount that has been expended on improvements to the canal out of revenues was 1,174,307 francs up to Dec. 31, 1898. The results of 1899 exceeded those of 1898 by 6,500,000 francs. The dividend was 108 francs a share instead of 97 francs. The number of vessels that passed through in 1899 was 3,503, of which 2,310

were British, 387 German, 226 French, 206 Dutch, 101 Austrian, 69 Italian, 65 Japanese, 61 Norwegian and Swedish, 55 Russian, 39 Spanish, 26 American, 26 Turkish, 21 Danish, 5 Belgian, 4 Greek, 3 Portuguese, 2 Egyptian, and 1 Siamese. The passengers numbered 221,332, of whom about 88,000 were civilians and 24,000 pilgrims or emigrants.

Political Events.—The British project of abolishing the mixed tribunals and replacing them with an Egyptian court was abandoned when the other powers showed no disposition to relinquish their treaty rights. Lord Cromer lays down as the conditions on which these courts may continue to exercise their functions free from the apprehension that their existence is threatened, first, that the judges shall adhere strictly, not merely to the text, but to the spirit of the law which regulates their attributes and not encroach on functions of the Government; second, that everything that is possible shall be done to avoid political lawsuits. The attempt that was made in the direction of Mohammedan law reform was also abandoned for the time on account of the resistance of the Mufti, who was removed, however, and another one appointed who may prove more amenable to British influence. The Mehkemeh Sheriah, or courts which deal with questions of personal status, such as marriage, divorce, and succession, were considered to be in an unsatisfactory condition. The particular reform that was proposed was that two Mohammedan members of the native Court of Appeals should be added to the appellate court over which the Grand Cadi presides. The judges of the secular courts are lawyers by profession, and only exceptionally of the ulema class from which cadis are chosen. On the matter being submitted to the Legislative Council the Mufti, whose special functions consist in interpreting the sacred law, declared himself strongly averse to the proposed change on the ground that it constituted an infraction of the immutable law of Islam. The Mufti having been dismissed, a commission was appointed under the presidency of the Minister of Justice to consider anew the whole question of the reform of the Mehkemehs. The archives of the religious courts, in which deeds and titles dating back hundreds of years in many cases were in utter confusion, were set in order with the aid of the Ministry of Justice. The number of suits in the civil native courts increased in 1899 over the number in 1898 by 20 per cent., while crime continued to diminish. The experiment of intrusting the decision of petty cases to the village authorities was successful. More slave dealers and kidnapers were prosecuted and convicted in 1899 than during the five previous years.

The Soudan.—The death of the Khalifa Abdullahi on Nov. 24, 1899, was followed by the opening to Europeans of the Soudan after an embargo that lasted sixteen years. Previously the White Nile country, south of Omdurman, was in a state of war. The Khalifa with his family and followers, numbering about 10,000, roamed on the left side of the river out of the range of the patrolling gunboats which kept supplies from being brought across the White Nile or the Blue Nile. After the dervish camp was finally captured and the Khalifa killed, the relations of the Mahdi and the principal emirs who survived were sent down to Egypt and imprisoned at Rosetta. The blacks of the Khalifa's army were freely enlisted in the Egyptian army. The Arabs were made to work in cultivating land or rebuilding Omdurman, or were taken on Major Peake's expedition to cut the sudd and open the whole course of the White Nile to

navigation. A general disarmament was carried out as thoroughly as possible, and only the Kinnana tribe remained at large in the Ghezireh between the Blue and White Niles and an emir with 3,000 warriors in the Bahr el Ghazal. When Lord Kitchener was summoned to South Africa Sir Reginald Wingate succeeded him as sirdar and as Governor General of the Soudan, the post which at present goes with the supreme command of the Egyptian army. The Anglo-Egyptian rule was strictly and severely military. The arrest of decay and the restoration of productive activity in this country made little progress because the first aim of the new authorities was to impress the inhabitants with their power, and they had too little money for military purposes. The work they set before themselves after the establishment of law and order was to increase the revenue, settle the frontiers, redistribute the population, register lands, rebuild the cities, and establish communications. The encouragement of European commercial enterprise, the readmission of missionaries, the establishment of a system of education, and the ultimate substitution of a civil for a military administration were objects less immediate and pressing. The British authorities concluded that it was impossible to abolish slavery, but kidnaping and buying or selling slaves were made punishable with seven years' imprisonment as a maximum. Attempts were made to check the importation of black slaves from the south, especially girls, and decrees were issued against ill treating or overworking slaves, but if slaves ran away the authorities restored them to their masters, although the status of slavery was not officially recognized. Greek traders came in when the embargo was removed, and the export of gum arabic was renewed. A caravan trade sprang up between the Blue Nile and Abyssinia. Besides the land and date taxes imposed early in 1899, taxes were placed on houses in towns, boats, and herds; 20 per cent. royalty was collected on gum, ivory, tobacco, ostrich feathers, and rhinoceros horns; and license dues were required for carrying firearms, selling liquor, ferrying, selling at auction, peddling, weighing, slaughtering, and selling in the markets. The Soudan military railroad, which was begun at Wady Halfa on Jan. 1, 1897, reached Halfaya, on the bank of the Blue Nile opposite Khartoum, on Dec. 31, 1899. The extension eastward to Abu Harraz was postponed for a year. If the line is carried on by way of Gedarif and Kassala to a port on the Red Sea it will probably divert the bulk of the trade of the Soudan, and it will strengthen the hold of England on the Soudan and tend to detach from Egypt its dependency in case of the withdrawal of the British from Egypt. A telegraph has been erected along the Blue Nile and by way of Lake Rudolph to Uganda. The project of cutting the *sudd* in the White Nile was undertaken in order to establish military communication between the Soudan and Uganda. It was expected, moreover, to increase the water supply of Egypt by making dikes where the river overflows at Shambe, and thus save a vast quantity of water that is lost by evaporation. Major Peake's expedition, comprising 4 British officers with 4 steamers and 700 men, mostly dervish prisoners, to be increased later to 2,000, left Omdurman in December, 1899. The work was completed according to the plans of Sir William Garstin in April, 1900. A navigable passage was cut in the Bahr el Jebel through 4 *sudd* barriers.

The Anglo-Egyptian authorities set to work to rebuild Khartoum, with the intention of abandoning and destroying Omdurman and transferring

the trade as well as the seat of government to old capital. The Khalifa's city was healthier, because its site is higher and drier, but the prestige of England and Egyptian sentiment seemed demand a return to the place in which Gordon died and from which Egypt ruled, and the destruction of the Mahdist city in retaliation for the destruction of the Egyptian city by the Mahdists. A consideration of great weight was also the fact that Khartoum could be better fortified. The city was laid out on a metropolitan scale, 3 miles long along the river front, and a mile and a half deep. The Gordon Memorial College was erected at the southeast end and the new palace of the Governor General in the center, on the exact site of Gordon's palace. Farther northwest were built the Government offices and the supply and ordinance stores. A large hotel was built with British capital. Near the center was placed the bazaar, surrounded by shops, and a covered market was constructed on Indian models. A mosque and an English church were built at Government expense. At the margin of the city, fronting the desert and reaching from the White to the Blue Nile, is a line of barracks and redoubts. The broad streets have tramways running through them and are illuminated by electric lights. In order to compel the inhabitants of Omdurman to remove to Khartoum a law was made requiring owners of lots to erect buildings of brick conforming to the regulations within two years on pain of forfeiture of their land. Most of the land of the restored capital, which no person valued while it remained in the desert, was bought up by wealthy Greek speculators. Whether the people are to be forcibly moved if they cling to their present abodes at Omdurman razed to the ground, has not been decided. Almost the only labor at present available for any purpose in the Soudan is the forced labor of soldiers, prisoners of war, and convicts employed by the Government.

The immense forest stretching from Gallabat to the Beni Shangul and from the Blue Nile to the Abyssinian hills is the home of vast herds of elephants, and abounds in giraffes, buffaloes, lions, leopards, warthogs, and many species of antelope. The Sobat region east of Fashoda and most of the country south of El Duem is also full of game and is more accessible. Indeed, the whole region round the upper waters of the Blue Nile, as well as the White Nile and its tributaries beginning about 100 miles south of Omdurman, is the most attractive part of Africa for hunters of big game. The Government has issued regulations forbidding the killing of zebras and ostriches, and allowing only a limited number of the elephants, buffaloes, hippopotamuses, rhinoceroses, and giraffes to be killed, no limit being placed on the killing of warthogs and antelopes. For this privilege a license fee of £5 must be paid and a separate fee for every animal killed, ranging from £24 for an elephant down to £1 for a warthog. For a lower fee one may shoot warthogs and antelopes, and all animals on which no restrictions are placed. Natives require no license except for buffaloes, elephants, and the other big game. The Governor General has reserved the right to declare a game reserve and to grant leases of the sporting rights over the whole or any part of such reserve.

Immediately after the opening of the Soudan missionaries rushed up to Omdurman—English, Church missionaries, American missionaries, a Coptic bishop, and the Roman Catholic bishop who formerly presided over the Austrian mission at Khartoum. Other Catholic and Protestant missionaries followed. The military authorities do not welcome them, and would not let them settle

cept on the condition that they would confine their religious ministrations to persons of their own faith and to the conversion of pagans, and undertake no propaganda among Mohammedans. Sir Kitchener proposed to send them on to Khartoum, where they could proselyte the pagan tribes of the equatorial provinces freely, but they declined to go. In Omdurman and Khartoum they were allowed to establish schools and hospitals, and the Roman Catholics to minister to the native Christians converted before the British conquest, and to found an establishment for missionary expeditions to the negro countries to the south.

El Obeid was occupied by an Anglo-Egyptian force under Col. Mahon on Dec. 17, 1899, the town having been deserted and left in ruins by the dervishes. The reoccupation of Kordofan by the British gave general satisfaction to the people.

The Government of the Soudan established friendly relations with the Sheikh Ali Dinar, son of the Sultan Hussein, who was left to Khartoum. From the moment of the Khalifa's crushing defeat at Omdurman the desert and Kordofan tribes, with the exception of the section of the Baggaras, who still adhered to the cause of their chief, threw in their lot with the Government, though they rendered no assistance to the Government forces in the subsequent operations against the Khalifa. Omdurman and the Ghezireh were found to be full of Arabs belonging to Kordofan and to far western tribes who had been driven away from their homes by the Khalifa. They were left without any regular means of subsistence. It was impossible in the existing state of insecurity for them to return to their homes, and their numbers were constantly augmented by the arrival of deserters from the Khalifa's army, and by the flight of the Baggaras. Arabs whose pastures were far enough north to be safe returned usually to their own districts, but their places were taken by inhabitants of the districts that had been raided by the Khalifa's army. Thus the situation remained practically unchanged until the overthrow and death of the Khalifa. After the main task of the Government was to send them back to their homes the inhabitants of the gum-producing region and to rid the Ghezireh of its mass of stranger population. Many thousands belonging to tribes of Kordofan and Darfour could not be got rid of until the road to Bara and El Omdurman was thoroughly opened up and the water supply improved. The Nubas and other tribes of the central and southern Kordofan were willing to render the Government active assistance in the military operations against the dervishes, but their efforts did not go beyond petty raids. After the death of the Khalifa they sent deputations to the Government and expressed their willingness to obey its commands. The Arabs had a large supply of firearms, and most of these remained in their possession after the final defeat of the Khalifa. Some of these firearms were issued by the Government to be used as a means of defense against the dervishes; others were procured from the dervishes themselves. After the overthrow of the Khalifa these arms were often employed in one way or another. The first step the Government took was to call in all the firearms, from the Bayuda tribe and the riverain population south of Berber a large number was recovered. In those districts raiding quickly ceased, wherever the Government was able to extend direct administration the same results followed. In the remoter districts, in which the people still retained their arms, the intertribal raids went on without abatement. Much time must elapse

before prosperity can return to the tribes of the Soudan. The population wasted away under dervish rule. The important Kabbabish and Shukrieh tribes suffered most and were left mere shadows of what once they were. The Baggaras suffered almost as much. Instead of being possessors of large herds of cattle, many of them, even of their chief men, were obliged to pick up a precarious living in the Ghezireh or in Gadaref by working for hire or turning their hands to occupations that were new to them. The budget estimate of revenue from the Soudan for 1899 was £ E. 51,500, of which £ E. 38,500 came from the land tax and other taxes collected in the mudirihs, £ E. 5,000 from the post office, £ E. 3,000 from telegraphs, and £ E. 5,000 from railroads. The expenses were estimated at £ E. 185,500, of which £ E. 123,000 were for administration, £ E. 5,000 for public buildings, £ E. 3,000 for the post office, £ E. 4,500 for telegraphs, and £ E. 55,000 for railroads. The deficit was made good by the Egyptian Government. The problem of taxation in the Soudan is a serious one for the Government, which feels bound to apply rigorous methods of collection usual in the Western countries, whereas the dervishes, if they exacted heavy taxes in prosperous seasons, did not attempt to collect taxes when the crops failed. Slavery is another problem hard to deal with. The frontier between the Soudan and the Italian colony of Erythrea was delimited in 1899 from Ras Kasar, on the Red Sea, to Sabderat, east of Kassala. The further delimitation up to the point where the line strikes Abyssinian territory was the subject of negotiations in 1900. The general basis of a frontier arrangement in respect to the country west of the Blue Nile was settled with the Negus Menelek, and commissioners were dispatched to survey the ground in dispute. An endeavor was made to cut through the *sudd*, the accumulation of vegetable growths and floating matter that obstructs the White Nile, the removal of which will enable steam craft to ascend the river and open up communication with Uganda. A party of British, French, and Belgian officers succeeded in penetrating from the south to the point where Major Peake with his party of Egyptians was engaged in cutting the *sudd*. Osman Digna was captured near Tokar on Jan. 19 with the help of the local sheikhs. Darfur has not been reconquered, and there the influence of the Senussi Mahdi has succeeded that of the Khalifa. The Senussi sect flourishes within the French sphere and is strongest in Wadai and Bornu. They obtain arms and ammunition from Europe by way of Benghazi, in Tripoli, and their Mahdi threatened to declare a jihad against England and to invade Egypt, but from his oasis in the desert south of Kufra it was impossible for him to carry out his threat, the absence of roads and water forbidding the movement of any considerable force. An abortive mutiny of the black troops in the Soudan against their British commanders was planned after the departure of Gen. Kitchener by some of the junior Egyptian officers, whose disaffection was partly the result of grievances about pay. Without incitement from above or sympathy from their fellow-officers they failed of their purpose, and were deserted by the troops whom they misled.

EXPLOSIVES. In the Annual Cyclopædia for 1885 (page 342) the subject of explosives was treated quite fully, and descriptions of gunpowder, gun cotton, nitroglycerin, dynamite, explosive gelatin, potassium chlorate powders, picric acid compounds, and liquid explosives, with their many varieties, were given. Since that time experts of different nations, in their efforts to surpass one

another, have invented new and more powerful explosives, the most important of which are here-with described.

In 1873 Dr. Hermann Sprengel outlined a series of explosives, among which was a class consisting of two bodies—one a liquid, the other a solid—which were harmless by themselves, but when mixed formed a substance that was capable of violent detonation. The safety with which such preparations could be transported to the place of action was an important consideration. This announcement led to the patenting of similar compounds in France by Turpin, under the name of *panclastite*, and in Germany by Hellhoff, under the name of *hellhoffite*. These attracted considerable attention, especially in consequence of the controversy as to their discovery, priority for which was naturally claimed by Sprengel. The *hellhoffite* consists of 47 parts of meta-dinitrobenzene and 53 parts of nitric acid with a specific gravity of 1.50. It requires a powerful detonator to explode it, and its intensity is greater than nitroglycerin. The difficulties of using an explosive in liquid form for blasting have prevented its application in that direction to any great extent, but its employment by Gruson for use in shells has given it some importance.

Jovite is an important high explosive invented by J. E. Blomer in 1892, and sold at prices competing with dynamite. It consists of 8 to 6 per cent. of nitronaphthalenes, 16 to 30 per cent. of nitrophenol, and 76 to 64 per cent. of sodium nitrate. It can not be exploded by friction, shock, exposure, fire, lightning, or electric sparks, and it is only by using such denotators as are employed with dynamite that it can be exploded. It is not sensitive to atmospheric influences, and can be used at all normal temperatures. When exploded it does not generate noxious gases, and therefore it can be satisfactorily used in underground work. It is not dangerous to make, and its properties seem to indicate that it is most valuable.

The explosive character of picric acid has long been known, and it has been used as an ingredient of several explosives, as was shown in the Annual Cyclopaedia for 1885, page 346; but in 1886 Eugene Turpin announced the possibility of detonating picric acid by itself. At first Turpin mixed this with collodion cotton and dissolved the mixture in ether, which he then formed into cartridges. This explosive became the property of the French Government, and received the name *melinite*. Later Turpin showed that molten picric acid by itself explodes much more violently than when in combination. The ordnance departments of many European nations at once began experimenting with picric acid, and it has resulted in the production of *melinite* in France, *lyddite* in England, and *ecrasite* in Austria, each of which is slightly different from the others but represents the working out of an identical problem by three different individuals. The processes of manufacture are Government secrets, and therefore they can only be surmised. Of *lyddite* it is said that the explosive is "simply picric acid brought into a dense state by fusion," while in the case of *melinite* it is said that the picric acid is "melted at a carefully regulated temperature in an iron or earthenware vessel standing in an oil bath." In both cases the picric acid is used as a filler, and is cast direct from the melting pot into the projectiles, although in *lyddite* the shells are said to be coated inside with "a special kind of varnish." For *melinite* a primer of gun cotton is used, whereas for *lyddite* the primer is said to be a mixture of 2 parts ammonium picrate and 3 parts

sodium nitrate. It was found that picric salts of an unstable nature were formed in the projectile in consequence of the contact of the picric acid with the metal walls of the shell, and experiments were made for the purpose of finding more stable compounds of that acid. Picric acid is chemically trinitrophenol, and is derived from phenol. It was found that trinitrocresol, derived from cresol, possessed the desired qualities, and that compound has been used similarly to picric acid for filling shells and torpedoes. In France, where it has been largely employed for that purpose, it is called *cresylite*.

In Austria the ammonium salt of trinitrocresol is used under the name of *ecrasite*. It is unaffected by moisture or differences of temperature, and its effect is said to be about double that of dynamite. These explosives, which are necessarily described together, are remarkable for their stability, remaining permanent under the influence of both cold and heat, and therefore they can be safely transported. When they are exploded the effects of their influence is six or seven times as great as those of black powder on compact rock or masonry, and one and a half to two times as great in earth. A shell filled with one of these picric compounds will rend the most solid and resisting plates of steel. The use of *lyddite* in South Africa caused some criticism in consequence of the dense fumes of yellowish-green gas resulting from the decomposition of the picric compound, which suffocated those who came in contact with them; but the latest announcements from England show that *lyddite* shells are to be supplied to the guns in the forts along the sea front of England, in place of shrapnel shells, which have been discontinued.

The most important recent advance in explosives is the successful manufacture and employment of smokeless powders. The history of their development was given in Charles E. Munroe's presidential address before the Washington section of the American Chemical Society in 1896. He showed that the earliest experiments that were made with smokeless powders were in 1800, when Howard discovered mercuric fulminate. Six years later Grindel carried on a series of experiments for the purpose of ascertaining the possibility of substituting ammonium nitrate for potassium nitrate as the oxidizing agent in gunpowder mixtures. Notwithstanding the deliquescent character of the ammonium salt, smokeless powders of that nature have been put on the market, as, for example, the amide powder patented by F. Gaens in 1885, which consisted of ammonium nitrate 80 parts, potassium nitrate 101 parts, and charcoal 40 parts. Subsequent to the discovery of gun cotton in 1845 experiments were made in Germany, France, and England, and also in Washington, with the new explosive; but the results were unsatisfactory, especially so as the powder was unstable and rapidly decomposed when stored. Capt. von Lenk, of the Austrian army, persisted in experimenting with it, and he has the credit of making the first attempt to use as a propelling agent an explosive that burns without developing smoke. This was in 1862, but an unfortunate explosion in the gun-cotton factory at Hirtenberg led to the abandonment of its use in Austria. In England, Abel continued studying gun cotton, and was successful in obtaining pulped, purified gun cotton, which he compressed into such forms as were desirable, with which he obtained some very promising results with field guns in 1867 and 1868. The next advances were the inventions, in 1882, of the *E. C. powder* by Reid and Johnson, and of the *J. B. powder* by Judson and Borland, both of which contain gun cotton in an unaltered state. But it was

until the invention of *Poudre B*, in France, Vieille in 1886, and that of *ballistite* by Nobel years later, that the present smokeless-powder industry began. According to Gutman, the smoke-powders at present known can be divided readily into three classes:

Powders in which gun cotton, either the so-called insoluble or the soluble variety, alone is used, which by the aid of a solvent has been condensed into a horny substance and then is formed into flakes or cords.

Powders in which a mixture of nitroglycerin and either dinitro- or trinitrocellulose is transformed into a similar hornlike substance, either with or without the aid of a solvent.

Powders that contain nitro derivatives of the aromatic hydrocarbons, either by themselves or in connection with nitrocellulose.

A. C. powder, patented in 1882 by Reid and Judson, is a gunpowder made by revolving pulped nitrocellulose and nitrates (barium, sodium, and potassium) in barrels, drying the grains, moistening with ether to harden them, and then adding fine oil to produce a reddish-brown color. It has the following composition: Nitro-cotton, 53.57; gun cotton, 1.86; barium nitrate, 34.26; potassium nitrate, 1.48; sodium nitrate, 3.07; volatile matter, 1.17; cellulose, 3.12; and aurine, 0.55. This powder is used in Great Britain and in the British colonies by sportsmen.

B. powder, invented by Judson and Borland in 1885, was prepared by mixing nitro-cotton with gun nitrate, with or without charcoal, and granulated in a revolving drum while water was added in a fine spray. The grains were dried and then moistened with a solution of one part ammonium in five parts of petroleum spirit, which hardened them and made them more slowly inflammable. It had a silver-gray color, and was used as a sporting powder.

In the class of gun-cotton powders, including both the flake variety and the granulated powder, the original smokeless powder invented by Vieille in 1886, which consisted of picric acid and gun cotton, but later the picric acid was omitted and *Poudre B* was made of gun cotton alone. The *A. C.* powders consist of gun cotton mixed with gun nitrate and potassium nitrate as oxidants, sodium carbonate as a neutralizer. These ingredients are condensed and hardened to a cellulose-like mass by means of a solvent like ether-alcohol, ethyl acetate, or acetone. The flaking is done by cutting machines. The exact composition of the more important flake powders is as follows: *Poudre B*, nitro-cotton 32.86, gun cotton 66, and volatile substances 1.14; *Poudre B. N.*, nitro-cotton 31.38, gun cotton 49.89, barium nitrate 2, potassium nitrate 3.43, sodium carbonate 1, and volatile matter 0.82; *Wetteren powder*, nitro-cotton 48.15, gun cotton 30.73, volatile matter 8.22, charcoal 12.12, and humus 0.77. The *Isidor* and *Van Förster* powders are of analogous composition.

The foregoing are military powders, while for sporting a granulated powder is made in Walsleben, Hanover, by mixing the nitrocellulose with ether and treating these ingredients in a kneading machine to effect complete solution. Water is then added and the kneading continued while steam is introduced, which results in the gelatin breaking up into fine grains, which are then freed from water by pressing, centrifugalizing and drying. Similar to the foregoing is the *nitrocellulose powder* invented by Lieut. John B. Magdon and used by the United States navy. It is made by steeping cellulose in nitric acid, and the resulting nitrocellulose is brought into

the colloid condition by treating with ether-alcohol and acetone. The solvent varies according to the special powder desired, as those made with the ether-alcohol colloid show a tendency to produce some smoke and deposit soot, while on the other hand the acetone colloid develops irregular pressures. In some cases certain oxidizing agents, as nitrates of metallic bases, are added to increase the velocity of the explosive; and when the action of the explosive is too violent, a substance rich in carbon, called a deterrent, may be added.

The powders made from nitroglycerin and nitrocellulose include *ballistite*, *cordite*, and *amberite*. *Ballistite* was invented by Alfred Nobel in 1888, and as made in England consists of 40 per cent. of gun cotton dissolved in 60 per cent. of nitroglycerin, with 1 or 2 per cent. of aniline added to the mixture as a neutralizing agent to insure stability. This mixture, when stirred up by compressed air in warm water, gelatinizes, and the solution may be completed by pressing out the water and working in a grinder. The resulting flexible, transparent, rubberlike sheets constitute *ballistite*, which may then be cut into flakes by machines. In Italy the sheets are forced through spaghetti machines, and the cord-shaped explosive is then called *flite*. According to analysis, *ballistite* consists of nitro-cotton 44.58, sodium carbonate 2.44, and nitroglycerin 52.99.

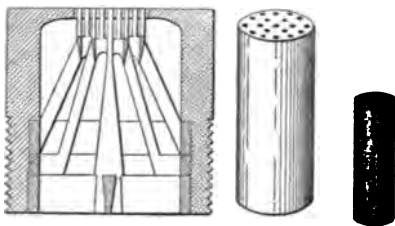
Cordite, which was patented in 1889 by Sir Frederick Abel and Prof. James Dewar, has the following composition: Nitroglycerin 58 parts, gun cotton 37 parts, with vaselin 5 parts (used as a restrainer), dissolved in 19.2 parts of acetone. The nitroglycerin is mixed by hand with the gun cotton and then put into a kneading machine and the acetone added. The latter gradually penetrates the mixtures of nitroglycerin and gun cotton and dissolves them both. When the mixture becomes uniform it is washed in cold water, and the paste is then dried to an elastic brown rubberlike mass, which is cut into suitable length for cartridges.

Amberite was patented by Curtis and André, and is said to consist of 44 parts of trinitrocellulose, 12 parts dinitrocellulose, and 40 parts nitroglycerin. This mixture is formed into grains, which are then treated with a solvent consisting of sulphuric ether with a little alcohol, which dissolves the dinitrocellulose and forms a kind of cement, which binds the gun-cotton fibers together and hardens the surface.

The principal explosive powders that consist of nitrocellulose and nitro derivatives of aromatic hydrocarbons are the following:

Indurite. In 1889 Dr. Charles E. Munroe, chemist at the United States torpedo station in Newport, R. I., "determined to attempt to produce a powder that should consist of a single substance in a state of chemical purity." He began by purifying the dried pulped military gun cotton, which he accomplished by extracting it with hot methyl alcohol in a continuous extractor, after which the insoluble cellulose nitrate was again exposed in the drying room. The highly nitrated cellulose thus obtained was then mixed with a quantity of mononitrobenzene, which scarcely affected its appearance and did not alter its powdered form. The powder was then incorporated upon a grinder, by which it was colloidized and converted into a dark translucent mass resembling India rubber. The sheet was then stripped off and cut into flat grains or strips, or it was pressed through a spaghetti machine and formed into cords, either solid or perforated, of the desired dimensions, which were cut into grains. "Then the granulated explosive was immersed in water boiling under the

atmospheric pressure by which the nitrobenzene was carried off and the cellulose nitrate was indurated so that the mass became light yellow to gray and as dense and hard as ivory, and it was



DIE AND PERFORATED CYLINDER OF SMOKELESS POWDER.
(HUDSON MAXIM PATENT.)

by this physical change in state, which could be varied within limits by the press, that I modified the material from a *brisant* rupturing explosive to a slow-burning propellent." This explosive is also known as the naval smokeless powder, and in his report for 1892 Secretary of the Navy Tracy says: "It is a gratifying fact to be able to show that what we could not accomplish through the assistance of others we succeeded in accomplishing ourselves, and that the results are considerably in advance of those hitherto attained in foreign countries." Experiments made with indurite showed that in two successive rounds in the 6-inch rapid-firing gun, using 26 pounds of the powder and a 100-pound projectile, the pressures were 13.96 and 13.93 tons and the velocities 2,469 and 2,456 feet per second respectively.

Du Pont powder. In 1893 F. C. and P. S. Du Pont, of Wilmington, Del., patented a smokeless powder consisting of nitrocellulose and nitrobenzene or another suitable solvent, which they granulated by a special process. Into a convenient holder fitted with stirring paddles water (containing in some cases niter) is poured, and then a quantity of finely divided gun cotton is added. By means of the paddles the mixture is stirred until the gun cotton is evenly suspended in the liquid, when nitrobenzene is added. A plastic flocculent mass is formed by the action of the solvent on the suspended gun cotton, which by slow stirring gradually becomes granular. The stirring is continued and steam is added until the solvent is entirely removed and the powder made dense and solid.

Rifleite, S. S., S. R., S. K., S. V., and S. B. powder are varieties of smokeless powder made by the Smokeless Powder Company of Warwick, England, for sporting. They are not patented, and their composition is secret, but from analysis they are believed to be soluble wood nitrocellulose mixed with niter and nitrobenzene, granulated in a manner similar to the process used in the manufacture of the E. C. powder.

Plastomenite, invented by Hermann Güttler, of Reichenstein, is made by melting dinitrotoluene over a water bath and gradually adding one fifth part of nitrocellulose. The resulting mass is formed into fine grains that are of different shades of brown. It finds its chief use for sporting.

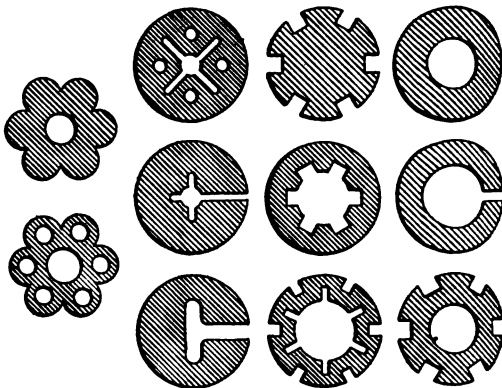
In addition to the foregoing there are several smokeless powders that deserve mention, but do not readily fall into the classification above. Among them are:

Kallivoda von Falkenstein powder, invented by J. K. von Falkenstein, is made by dissolving finely divided cellulose in a 10-per-cent. solution of potassium permanganate, and mixing the resulting amorphous cellulose with manganese dioxide, form-

ing a brown mass. This product is then mixed with nitric acid, and after standing for twelve hours is heated over a water bath until all the manganese dioxide is converted into manganese nitrate, while the amorphous cellulose separates as a white precipitate and is pressed into a cake, which, after drying, is ground into powder. This powder is next nitrated with a mixture of nitric and sulphuric acids, and the nitrocellulose washed and placed in solution of potassium permanganate, to which nitric acid is added and the mixture heated. The resulting nitrocellulose is washed, ground, and made into a paste with gum tragacanth, which is finally pulverized, and the grains are sifted, to be glazed in a drum.

Kolffte is a smokeless powder invented by Herbert Kolff, of Bonn, Germany, and is made by nitrating vegetable waste—such as malt grains and beet-root cuttings—and sulphonating the resulting cellulose with alkaline sulphates under a pressure of 5 atmospheres. The product is then mixed with niter and soaked in a solution of dinitrobenzene.

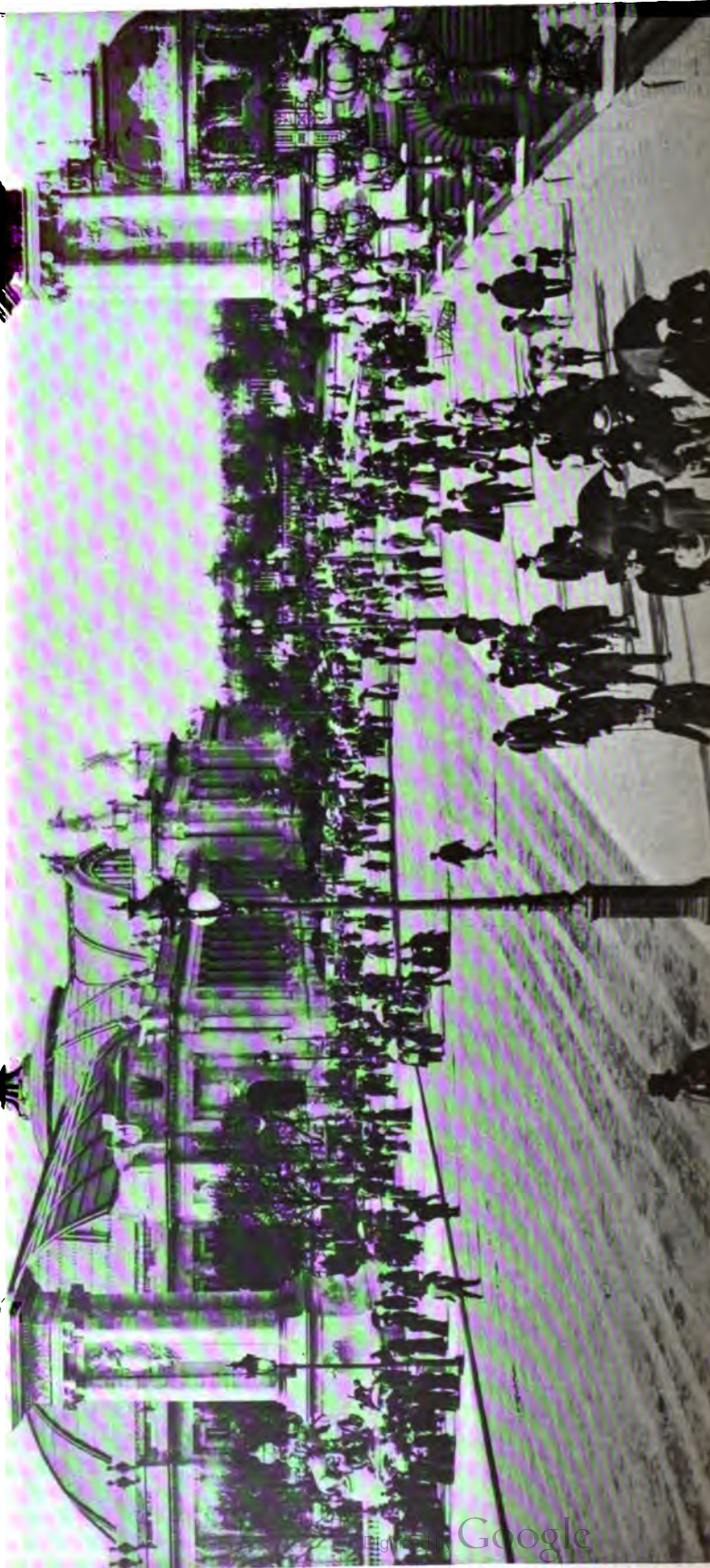
Poudre pyroxylée. A smokeless powder with this name has been issued by the French Government for sporting. Its composition is as follows: Soluble gun cotton 28 parts, insoluble gun cotton 37 parts, barium nitrate 29 parts, and potassium nitrate 6 parts. The ingredients are first mixed by hand and then in incorporating mills, with the addition of 40 per cent. of water. The mass is then pressed through a sieve with $\frac{1}{10}$ -inch mesh, and dried in drying house till it has less than 1 per cent. of moisture. After the drying, ether is added to the mixture and the paste is granulated, after which it is revolved in a wooden drum, moistened with water, and again dried. The grains are then sorted and glazed, and the finished product consists of regular and hard yellowish grains.



PERFORATED POWDER GRAINS. (HIRAM S. MAXIM PATENT.)

Poudre J. This explosive was invented by M. Bruneauand, and is made by the French Government for sporting. It is brown, much harder than black powder, and is produced in four sizes. The process by which it is made has not been published, but its composition is said to be 83 parts of gun cotton and 17 of potassium bichromate.

Literature.—In addition to the Explosive Notes issued by Dr. Charles E. Munroe at irregular intervals from Columbian University, Washington, D. C., there is published from time to time Notes on the Construction of Ordnance, from the Ordnance Department of the United States Navy Department. A periodical entitled Arms and Explosives is issued regularly in London, and besides the foregoing the following works may be con-



lited: Explosives and their Composition, by Wolt C. Foster (New York, 1888); A Dictionary Explosives, by J. P. Cundill (London, 1889); Handbook on Modern Explosives, by Manuel Essler (London, 1890); Smokeless Powder and its Influence on Gun Construction, by J. A. Longridge (London, 1890); The Modern High Explosives, by Manuel Eissler (New York, 1893); Index to the Literature of Explosives (American periodicals, by Charles E. Munroe, Baltimore, 1893); The Manufacture of Explosives, by Oscar Guttman (2 vols., London, 1895); and Manual of Explosives, by Courtenay De Kalb (Toronto, 1900).

EXPOSITION, PARIS UNIVERSAL. International world's fairs may be said to have begun with that held in London in 1851. This was followed by those held in Dublin and New York in 1853, in Paris in 1855, in London in 1862, in Paris in 1867, in Vienna in 1873, in Philadelphia in 1876, in Paris in 1878, in Paris in 1889, and in Chicago in 1893. It had become an established custom to hold exhibitions in Paris every eleven years, and accordingly, before the close of the fair in Chicago in 1893, preparations were begun for holding an exposition in Paris in 1900.

Origin.—By a decree of July 13, 1892, President Carnot charged the Minister of Commerce and Industry with the preparation of a universal exposition of works of art and of industrial and agricultural products, to be held in Paris during six months of 1900. On Sept. 9, 1893, a second decree was issued, placing the administration of the exposition under the authority of the Minister of Commerce, Industry, and the Colonies, to be directed by a commissioner general. It further established a list of the departments. After other preliminary measures, on June 13, 1896, the Senate and the Chamber of Deputies enacted the complete law that provided for the exposition. In accordance with this law, the state contributed 20,000,000 francs toward the expenses of the exposition. The city of Paris agreed to raise a like amount, which was to represent one fifth of the total expenses, while the remainder of the amount required was obtained through financial establishments by the issue of 3,250,000 bonds, having a face value of 20 francs each and comprising 20 admission tickets with numbers for various lottery drawings. Besides this, 30,000,000 francs was advanced by the Bank of France, and the sale of concessions and materials provided an additional 5,000,000 francs, making a total of 140,000,000 (\$27,020,000) that was raised for the exposition fund.

Administration.—The general supervision of the exposition was under the direction of the Minister of Commerce, Industry, Posts, and Telegraphs, who was at first Paul Delombre and later M. Millerand. The immediate direction of the exposition was intrusted by the minister to the following staff: Commissioner General of the Exposition, Alfred Picard, President of the Council of State; Director General of Exploitation, Delaunay-Bellefleur, Honorary President of the Chamber of Commerce of Paris; Adjunct Director General of Exploitation, Stephanie Derville, former President of the Tribunal of Commerce of the Seine; Director of Architecture, Parks, and Gardens, M. Bouvard, Director of the Department of Architecture and Landscape Gardening of the City of Paris; Director of Roads, M. Deffrance, Administrative Director of the Department of Public Ways, Waters, Sewers, and Lighting of the City of Paris; Director of Finance, M. Grison; Secretary General, Henry Mardon, Member of the Council of State; Chief of the Department of Bridges of the Seine, Jean Resal, Engineer in Chief of Bridges and Roads; Chief of the Department of Law, Edmond Moreau, former

President of the Company of Administrators before the Tribunal of Commerce of the Seine; Delegate to the Section of Fine Art, M. Roujon, Director of Fine Arts; Delegate to the Section of Agriculture, M. Vassillière, Director of Agriculture; and Delegate to the Section of Colonies and Countries under Protectorate, M. Dislere, Councilor of State.

Location.—The site occupied by the exposition was similar to that of previous expositions in Paris. Beginning at the southwest angle of the Place de la Concorde, the grounds of the exposition extended along two narrow strips on the banks of the Seine for a mile and a half to the Avenue de Suffren, which forms the western boundary of the Champ-de-Mars. The principal exhibition spaces were four, arranged in pairs—the park of the Art Palaces and the Esplanade des Invalides at the east, the Champ-de-Mars and the Trocadéro on the west. On the south side of the river the Esplanade des Invalides was united with the Champ-de-Mars by the Quai d'Orsay. On the north side the park of the Art Palaces was connected with the Trocadéro by the Quai de la Conférence, the Cours-la-Reine, and the Quai Debilly. The total surface of the four areas and the connecting links along the Seine was 336 acres. In addition to the space just mentioned, an area was secured in the Bois de Vincennes on the eastern border of the city as an annex, which was devoted to transportation and sports. Convenient access was had to the various parts of the exposition by means of an electric railway and a moving sidewalk.

Grounds and Buildings.—The grounds, which had long been park areas, were well provided with trees and shrubs, which had been carefully nurtured, so that artificial gardening to any extent was unnecessary to increase the beauty of the site. The main entrance to the exposition was at the southwest corner of the Place de la Concorde, where stood the Port Monumentale, designed by the architect Binet. This led to the new Avenue Nicholas II, which extended from the Champs-Élysées to the Pont Alexandre III. On the west side of this avenue was the Grand Palace of Art, while facing it on the east was the Petit Palais. These two buildings were permanent structures, and were erected to take the place of the old Palais de l'Industrie, which formed the principal building of the exposition in 1855. The Grand Palace had a façade 500 feet long, and in the perfection of its design and the profusion of its ornamentation was intended to be the noblest exponent of contemporary French architecture and sculpture. The exterior was elaborately decorated with ornamental and sculptural designs, which added greatly to its imposing appearance and massive grandeur. A splendid colonnade of Corinthian pillars was an attractive feature of the façade. Extending along the front were several groups of statuary depicting art in different eras of the world's history, while on the wings and colonnades were eight seated figures of similar representative character. Along the main façade, under the grand colonnade, was a frieze 240 feet long by 10 high, divided into ten sections, five representative of modern art and five of ancient. In the building were exhibited examples of contemporary art, both French and foreign. The Petit Palais was of similar character. A bas-relief above the entrance represented the city of Paris protecting art. On either side of the entrance were groups of statuary, that on the right being emblematic of the four seasons, while that on the left represented the Seine and its tributary rivers. On top, to the right and left of the entrance, were groups representing the genius of sculpture and the genius of painting. The building contained the centennial

exposition which was illustrative of the history of French art. Connecting the Avenue Nicholas II with the Esplanade des Invalides was the Pont Alexandre III, which is likewise to remain as a permanent memorial of the exposition. The foundation stone of this bridge was laid in October, 1896, by the Czar Nicholas II and President Faure, who named it in honor of Alexander III, father of the present Czar, to whose efforts, it is said, the alliance of

west, along the river, were the following special buildings: Italy, Turkey, United States, Austria, Portugal, Bosnia and Herzegovina, Peru, Hungary, Persia, Great Britain, Belgium, Luxembourg, Norway, Finland, Germany, Bulgaria, Spain, Monaco, Roumania, Sweden, Greece, and Servia. Beyond the Street of Nations were the buildings devoted to the military exhibits and the naval exhibits. Along the Esplanade of the Champ-de-Mars were the



ALEXANDER III BRIDGE.

friendship between the two nations is mainly due. The total length of the bridge is 257 feet, and the width 130 feet. The roadway occupies a space 70 feet in width, and the sidewalk on either side is 30 feet wide. At both entrances are two pylons in white marble, each 70 feet high, surmounted by gilt-bronze statuary representing Pegasus with Fame about to take her flight. At the lower part of the pylons are four fine pieces of statuary representing France at various epochs. Two groups of massive lions guard the approach to the bridge. Broad flights of stone steps lead from the lower quays to the floor of the bridge at each abutment, and at the top of these steps are groups of statuary representing the Children of the Vases. The cost of the bridge was estimated at \$400,000, and it is said to be the finest of its type in existence. Extending along the Cours-la-Reine were the pavilion of the city of Paris, which contained the special exhibits of the Paris municipality, the two buildings devoted to the horticultural exhibit, and the building in which the congresses were held. Still farther along the river was Old Paris, an archaeological restoration of mediæval, seventeenth and eighteenth century quarters of the city, with inns and restaurants along the river side. On the Esplanade des Invalides were the buildings devoted to foreign industries and decorative arts. To the

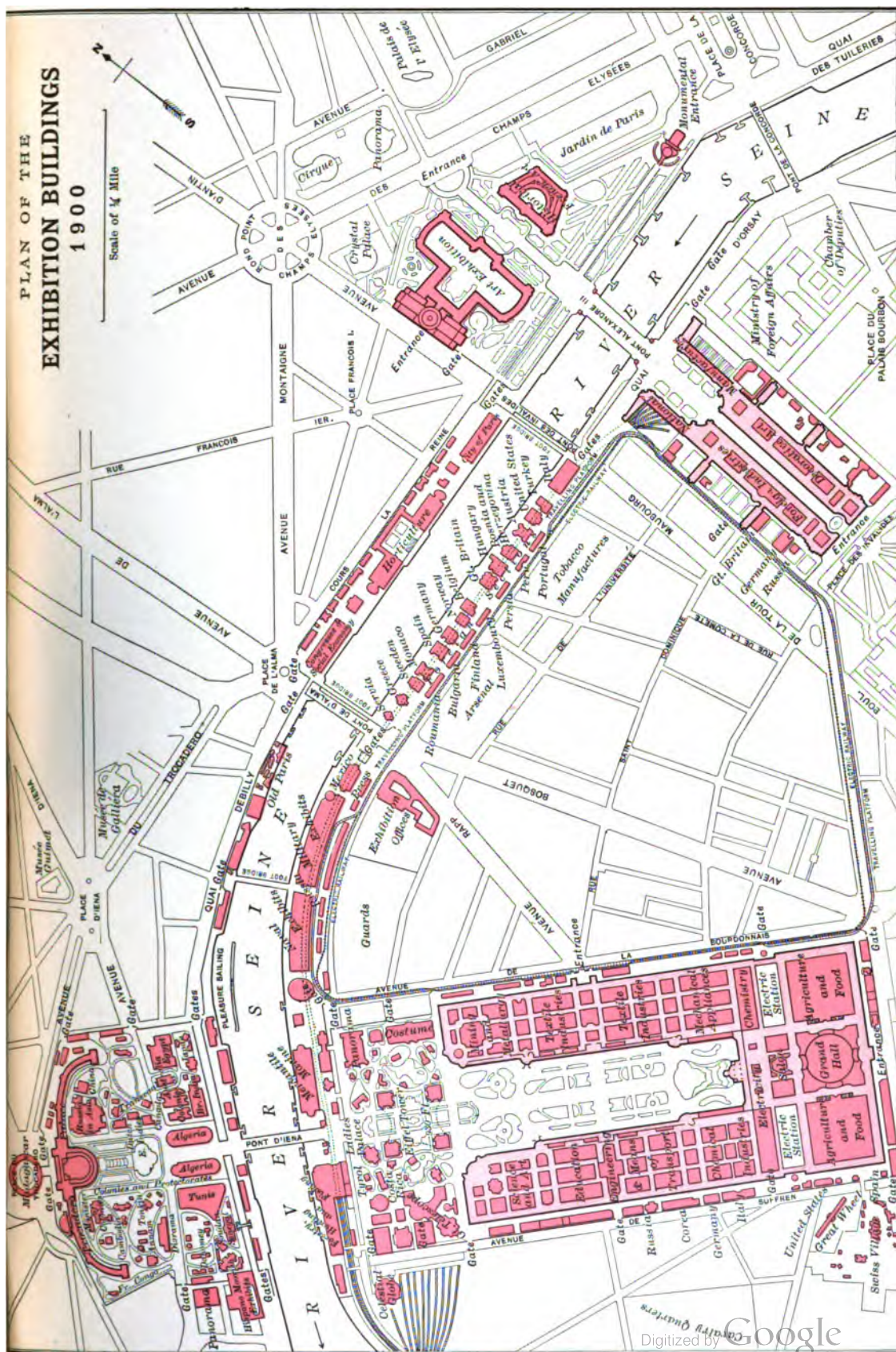
special structures occupied by Mining and Metallurgy, Textile Industries, Mechanical Appliances, Chemistry, Electricity, Agriculture and Food, Chemical Industries, Engineering and Means of Transport, Education, and Science and Art. These buildings were white, varied with colored ornamentation of yellow, terra cotta, and blue, while there were many imposing stained-glass windows, a great deal of gilding, and everywhere floral sculpture. On both sides were terraces, arches, and arcades, while on the left, looking from the Eiffel Tower, was a continuous line of restaurants. In the immediate vicinity of the Eiffel Tower were the buildings of Costume, Panorama, Great Telescope, Celestial Globe, and similar features, while on the banks of the Seine were the buildings devoted to the Mercantile Marine, Forestry, Hunting, and Fishing. The Trocadéro on the north bank of the Seine was devoted to French and foreign colonies, including the buildings erected by the United States for the exhibits of Porto Rico, the Philippines, the Hawaiian Islands, and Alaska, as well as Cuba.

Classification.—The systematic grouping of the objects to be exhibited was arranged along educational lines into 18 groups, with subdivisions into 121 classes. These were as follows:

Group I, Education and Instruction—Class 1,

PLAN OF THE EXHIBITION BUILDINGS 1900

Scale of 1/4 Mile



Education of the Child, Elementary Instruction, Instruction of Adults; 2, Secondary Education; 3, Higher Education, Scientific Institutions; 4, Special Education in Fine Arts; 5, Special Education in Agriculture; 6, Special Industrial and Commercial Education.

Group II, Works of Art—Class 7, Paintings, Cartoons, Drawings; 8, Engraving and Lithography; 9, Sculpture and Engraving on Medals and Coins; 10, Architecture.

Group III, Appliances and General Processes relating to Literature, Science, and Art—Class 11, Photography, Various Printing Processes; 12, Photography; 13, Books, Musical Publications, Book-binding (equipments and products), Newspapers, Posters; 14, Maps and Apparatus for Geography and Cosmography, Topography; 15, Instruments of Precision, Coins and Medals; 16, Medicine and Surgery; 17, Musical Instruments; 18, Theatrical Appliances and Equipment.

Group IV, Machinery—Class 19, Steam Engines; 20, Various Motors; 21, General Machinery; 22, Machine Tools.

Group V, Electricity—Class 23, Machines for generating and Using Electricity; 24, Electrochemistry; 25, Electric Lighting; 26, Telegraphy and Telephony; 27, Various Applications of Electricity.

Group VI, Civil Engineering, Transportation—Class 28, Materials, Equipment and Process relating to Civil Engineering; 29, Models, Plans, and Signs for Public Works; 30, Carriages and Wheelwright's Work, Automobiles and Cycles; 31, Saddlery and Harness; 32, Equipment for Railways and Street Railways; 33, Material and Equipment used in the Mercantile Marine; 34, Aerial Navigation.

Group VII, Agriculture—Class 35, Farm Equipment and the Methods of Improving Land; 36, Appliances and Methods of Viticulture; 37, Appliances and Methods used in Agricultural Industries; 38, Theory of Agriculture, Agricultural Statistics; 39, Vegetable Food Products; 40, Animal Products; 41, Inedible Agricultural Products; 42, Useful Insects and their Products, Injurious Insects and Plant Diseases.

Group VIII, Horticulture and Arboriculture—Class 43, Appliances and Methods of Horticulture and Arboriculture; 44, Vegetables; 45, Fruit Trees and Fruits; 46, Trees, Shrubs, Ornamental Plants, Flowers; 47, Plants of the Conservatory; 48, Pots and Plants for Gardens and Nurseries.

Group IX, Forestry, Hunting, Fishing, Gathering Wild Crops—Class 49, Appliances and Processes used in Forestry; 50, Products of the Cultivation of Forests and of Forest Industries; 51, Hunting Equipments; 52, Products of Hunting; 53, Fishing Equipments and Products, Fish Culture; 54, Appliances for Gathering Wild Crops and Products obtained.

Group X, Foodstuffs—Class 55, Equipment and Methods employed in the Preparation of Foods; 56, Farinaceous Products and their Derivatives; 57, Bread and Pastry; 58, Preserved Meat, Fish, Vegetables, and Fruit; 59, Sugar and Confectionery; 60, Condiments and Relishes; 61, Wines and Spirits; 62, Sirups and Liqueurs, Distilled Spirits; 63, Commercial Alcohol; 64, Various Beverages.

Group XI, Mining and Metallurgy—Class 65, Working of Mines, Ore Beds, and Stone Quarries; 66, Metallurgy; 67, Metal Working.

Group XII, Decoration and Furniture of Public Buildings and Dwellings—Class 68, Permanent Decoration of Public Buildings and Dwellings; 69, Stained Glass; 70, Paper Hangings; 71, Household Artistic Furniture; 72, Carpets, Tapestries, Fabrics for Upholstery; 73, Upholsterers' Deco-

ration; 74, Ceramics; 75, Glass and Crystal; 76, Apparatus and Processes for Heating and Ventilation; 77, Apparatus and Methods, not Electrical, for Lighting.

Group XIII, Threads and Yarns, Fabrics, Garments—Class 78, Materials and Processes for Spinning and Rope Making; 79, Equipment and Processes used in the Manufacture of Textile Fabrics; 80, Equipment and Processes used in Bleaching, Dyeing, Printing, and Finishing Textiles in their Various Stages; 81, Equipment and Processes used in Sewing and making Wearing Apparel; 82, Threads and Fabrics of Cotton; 83, Threads and Fabrics of Flax, Hemp, etc.; Cordage; 84, Yarns and Fabrics of Wool; 85, Silk and Fabrics of Silk; 86, Laces, Embroideries, and Trimmings; 87, Industries producing Wearing Apparel for Men, Women, and Children; 88, Various Industries connected with Clothing.

Group XIV, Chemical Industries—Class 89, Chemical and Pharmaceutical Arts; 90, Manufacture of Paper; 91, Leather and Skins; 92, Perfumery; 93, Tobacco and Matches.

Group XV, Diversified Industries—Class 94, Stationery; 95, Cutlery; 96, Silversmith's and Goldsmith's Ware; 97, Jewelry; 98, Clock and Watch Making; 99, Works of Art in Bronze, Cast Iron, and Wrought Iron, Repoussé Work; 100, Brushes, Fine Leather Articles, Fancy Articles, and Basket Work; 101, India-Rubber and Gutta-Percha Industries, Articles for Traveling and for Encamping; 102, Toys.

Group XVI, Social Economy, Hygiene, Public Charities—Class 103, Apprenticeship, Protection of Child Labor; 104, Wages, Industrial Remuneration, Profit Sharing; 105, Large or Small Industries, Co-operative Associations for Production or for obtaining Credit, Trade Unions; 106, Farming on a Large or Small Scale, Agricultural Unions and Banks; 107, Protection of Workers in Factories, Regulation of Work; 108, Workmen's Dwellings; 109, Co-operative Stores; 110, Institutions for the Mental and Moral Improvement of Workmen; 111, Provident Institutions; 112, Public or Private Movements for the Welfare of the People; 113, Hygiene; 114, Public Charities.

Group XVII, Colonization—Class 115, Methods of Colonization; 116, Colonial Resources; 117, Special Merchandise suitable for export to Colonies.

Group XVIII, Military and Naval—Class 118, Ordnance and Equipment for Artillery; 119, Military Engineering and Accessories; 120, Naval Construction, Hydraulics, Torpedoes; 121, Cartography, Hydrography, Various Instruments; 122, Administrative Departments; and, 123, Hygienic and Sanitary Equipment.

Opening Exercises.—It was originally provided that the exposition should open on May 5 and close on Oct. 31, but these dates were changed to April 15 and Nov. 11. The official opening took place on April 14, on which occasion the members of the diplomatic corps, Senators and Deputies, and 14,000 other invited guests were present. The cold, cheerless, almost winter weather that had prevailed up to that time gave place to a bright, warm, and perfect day. At the Salle des Fêtes, the farthest extremity of the Champ-de-Mars, the inauguration ceremony took place. At 2.30 p.m. President Loubet arrived, escorted by M. Millebrand, Minister of Commerce; M. Picard, the Commissioner General; and the chief officials of the exposition. As he entered the grounds a great chorus greeted him by singing the Marseillaise, and as he entered the building the orchestra and military bands played a Marche Solennelle, by Massenet. The scene within the building was remarkably brilliant. Since the jubilee of Queen



THE EIFFEL TOWER, WITH VIEW OF THE CHAMP DE MARS.

Victoria or the coronation of the Czar, no such congress of strange and gorgeous costumes had been seen. President Loubet took his stand in front of the dais, and was briefly addressed by M. Millerand, who said, "The persevering efforts and the patient energy of M. Picard and of his colleagues made possible the prodigious work which I present to you to-day." He spoke eloquently of the various races of mankind as of one brotherhood. He eulogized the marvels of the economic revolution that had produced steam and electricity, which was gradually relieving flesh and blood. "Machinery," he said, "was destined to become the queen of the world." In response, President Loubet said: "This work of harmony, peace, and progress, however ephemeral its outward show, will not have been in vain; the present meeting of the governments of the world will not remain sterile. I am convinced that, thanks to the persevering affirmation of certain geniuses, thoughts with which the expiring century has resounded, the twentieth century will witness a little more fraternity and less misery of all kinds, and that ere long, perhaps, we shall have accomplished an important step in the slow evolution of the work toward happiness and of man toward humanity. Under these auspices, and with this hope, I declare the exposition of 1900 open." The chorus then sang a Hymn to Victor Hugo, by Saint-Saens, and the orchestra and bands played a *Marche Heroique*, by Theodore Dubois. This concluded the opening ceremony, and the official party proceeded to an adjoining room, where the diplomatic corps and the chief commissioners of the exposition were presented to the President. A tour of the grounds followed. As they passed the pavilion of the United States the Stars and Stripes were

dipped from the flagstaff, and two American marines, stationed one on each side of the Washington statue, waved a tricolor, while a group of Americans gathered on the bank in front of the pavilion gave President Loubet a ringing cheer.

Among all the rulers and royalties that visited Paris during the exhibition the Shah of Persia alone was the object of a murderous anarchistic assault. He took no precautions, having no fear of political enemies in Europe, and so offered an opportunity to a young French anarchist of disordered mind, who was prevented from shooting him only by the Shah's own quickness and that of his Grand Vizier.

International Jury.—Three classes of juries were organized to judge exhibits at the exposition: first, the class juries, whose function was to examine and report on entries; second, the group juries, who superintended and carried forward the work of the class juries; and, third, the superior juries, by whom alleged mistakes and injustices were considered and finally adjudged. As is customary, the judges were selected from among the various nations exhibiting, and the number of jurors taken from the United States was 95, who were appointed by Commissioner-General Peck, and were distributed among the groups as follows: Education and Instruction, Miss A. T. Smith, J. N. Norton, H. L. Taylor, and S. P. Tuck; Art, F. D. Millet, Alexander Harrison, J. B. Cauldwell, Augustus St. Gaudens, and Thomas Hastings; Letters, Sciences, and Arts, Claude M. Johnson, A. S. Capehart, Edgar Cameron, D. O. Haynes, J. K. Rees, C. H. Beard, S. P. Veit, Milward Adams, and W. R. Hoag; General Mechanics, Charles Le Blanc, Storm Bull, H. O. Berg, Francis E. Drake, W. D. Ball, G. R. Ostheimer,



THE STREET OF NATIONS, PARIS EXPOSITION.

G. R. Hering, J. S. Anthony, R. C. Lewis, and C. T. Malcomson; Civil Engineering, J. A. Ockerson, I. A. Risse, J. W. Howard, W. Renshaw, G. S. Wilkins, and C. T. Purdy; Agriculture, C. C. Dudson, Sylvain Bloch, H. E. Alford, Charles R. Dodge, M. L. Floyd, J. I. Schulte, C. W. Dabney, and J. A. Leclerc; Horticulture and Arboriculture, J. M. Francis, W. A. Taylor, H. N. Dunlap, and G. B. Brackett; Forests, Hunting, and Fishing, Richard Wiener, A. C. Baker, and Morton Mitchell; Provisions, N. A. Carleton, Alfred Schweizer, L. S. Ware, H. W. Wiley, Julius Schuler, J. P. Smith, and L. J. Vance; Mines and Metallurgy, George Chartier, F. W. Clarke, H. M. Howe, E. W. Johnson, and F. M. Head; Decorative Art and Furniture, A. G. Wilkinson, Roger Riordan, C. E. Spratt, Goodman King, Lazard Kahn, W. S. Ward, and W. F. Wolfe; Chemical Industries, Joseph Leidy, F. Alvarez, A. Legallet, G. R. Lorenz, E. W. Dayton, A. J. G. Hodenpyl, C. F. Greene, and A. G. Stein; Textures and Clothing, J. F. Bancroft, William Harper, Franklin Allen, H. A. Flurschein, Henrietta Olberg, and J. S. Griffin; Diversified Industries, M. H. Hulbert, A. Vignos, Paul Bartlett, E. D. Jones, W. F. Willoughby, Miss Jane Addams, and Percy Peixotto; Social Economy and Hygiene, W. H. Tolman, N. P. Gilman, J. P. McKeehan, and C. A. Rosell.

Exhibits.—According to the official catalogues, there were 79,712 entries, distributed among the 18 groups as follows: Group I, 7,142; Group II, 8,620; Group III, 4,779; Group IV, 1,317; Group V, 1,051; Group VI, 3,378; Group VII, 8,739; Group VIII, 1,361; Group IX, 2,315; Group X, 14,308; Group XI, 3,735; Group XII, 3,928; Group XIII, 5,256; Group XIV, 2,942; Group XV, 3,948; Group XVI, 5,380; Group XVII, 888; Group XVIII, 657. Of these exhibits, 6,674 were from the United States. The number of exhibits from France was 31,946, which alone exceeded the United States. It is impossible to summarize the exhibits shown, but the number of awards received by exhibitors from the United States demonstrates the superiority and remarkable advances that have been made in this country since the Columbian Exposition, held in Chicago in 1893. The following extracts from a series of articles by experts will serve to show something of the character of what was done for the United States by its exhibitors in Paris. The fine arts exhibit constituted unquestionably the finest collection of works by American artists that had "ever been brought together." The mining exhibit was described as comprising representative specimens of all of the commercial mineral products of the United States, a general collection of systematic mineralogy, a reference library, and a collective exhibit of metallurgical processes and products. The army and navy of the United States were represented by a collection of exhibits sent by the War and Navy Departments, or the various bureaus thereof, by private individuals and by firms who contracted for the work under the Government, or to furnish the military and naval service with war materials, apparatus, and appliances.

Awards.—The work of the Jury of Awards, notwithstanding the enormous number of exhibits to be examined and the intense heat prevalent in Paris, proceeded with remarkable celerity, and on Aug. 18 the announcement of the awards was made by President Loubet. According to the official bulletin, 42,790 awards were made, which were distributed as follows: Grand prizes, 2,827; gold medals, 8,166; silver medals, 12,244; bronze medals, 11,015; and honorable mentions, 7,938. In addition to the foregoing, about 50,000 commemorative diplomas will be issued to collaborators. Of the

awards made, the United States received: Grand prizes, 240; gold medals, 597; silver medals, 776; bronze medals, 540; honorable mentions, 322; total, 2,476, or more awards than any other nation exhibiting except France. The official comment has been made that these figures "indisputably demonstrate that not only did the United States have many more exhibitors at the exposition than any other foreign nation, but that the extent and quality also of the exhibits have been approved by the ablest international jury ever organized, which has granted the exhibitors of our nation the largest number of awards of all of the visiting nations." Germany received 1,826 awards; England, 1,727; and Russia, 1,493.

Congresses.—Preliminary announcements were issued showing the following list of proposed congresses to be held during the exposition:

I. Art, which was again subdivided into the following subjects, to each of which several days were devoted—Music, Photography, Dramatic Art, Architecture, Municipal Art, Teaching of Art.

II. Mining, Engineering, and Applied Science, subdivided into Gold and Silver Assaying, Mines and Metallurgy, Automobiles, Testing of Materials, Steam Engines, etc., Applied Mechanics, Applied Chemistry, Fire Brigades, Thread Numbering, Gas, Tramways, Aeronautics, Railroads, Acetylene.

III. Maritime Affairs, subdivided into Naval Architecture and Construction, Navigation, Chronometry, Merchant Marine, Maritime Law.

IV. Mathematical, Physical, and Chemical Science, subdivided into Applied Mechanics, Applied Chemistry, Chemistry, Mathematics, Physics, Electricity.

V. Natural Science, subdivided into Ornithology, Alpinists, Geology, Meteorology, Botany.

VI. Agriculture and Forestry, subdivided into Horticulture, Forestry, Agricultural Stations, Viticulture, Cattle Feeding, Agriculture, Agricultural Co-operation, Apiculture, Fruit Culture and Arboriculture, Aquiculture and Fisheries, Wine and Cider Making.

VII. Medicine, Hygiene, etc., subdivided into Homœopathy, Professional Medicine, Medical Press, Electrology and Medical Radiology, Pharmacy, Medicine, Dermatology, Dentistry, Hygiene, Hypnotism, Physical Education, Pharmacy Specialties.

VIII. Anthropology, Archæology, and History, subdivided into Numismatics, Comparative History, Anthropology, and Prehistoric Archæology, Ethnography, Basque Studies, History of Religion, Folklore, Americanists.

IX. Education, subdivided into Fencing, Music, Modern Language Teaching, Higher Education, Secondary Education, Primary Education, Philosophy, Educational Press, Stenography, Bibliography, Psychology, Teaching of Art, Physical Education, Popular Education.

X. Technical, Social, and Commercial Education, subdivided into Agricultural Education, Teaching of Social Science, Technical and Industrial Education, Social Education.

XI. Geographical and Colonial Questions, subdivided into Colonies, Colonial Sociology, Economic and Social Geography.

XII. Industry and Commerce, subdivided into Grocery Trade, Ramie, Commercial Travelers and Agents, Baking Trade, Wine and Spirit Trade, Commerce and Industry, Tariff Regulations, Milling Trade.

XIII. Property and Finance, subdivided into House Property, Movable Property, Joint-Stock Companies, Landed Property, Insurance, Actuaries, Copyright (Literary and Artistic), Indus-

trial Property and Copyright, Comparative Law, Inventors' Associations.

XIV. Literature and the Press, subdivided into Press Associations, Medical Press, Educational Press, Stenography, Librarians.

XV. Labor and Co-operation, subdivided into Friendly Societies, Young Workmen's Aid Societies, Housing, Workmen's Protection and Compensation, People's Credit Banks, Workmen's Co-operative Productive Associations, Co-operative Societies, Profit Sharing, International Co-operative Alliance.

XVI. Women, subdivided into Women's Work and Institutions, Women's Rights.

XVII. Philanthropy, subdivided into Housing, Vegetarian, Discharged Prisoners' Aid, Life Saving and First Aid, Poor Relief, Blind, Deaf-Mutes, Antislavery, Red Cross, Abuse of Tobacco, Sunday Rest.

XVIII. Peace.

now unanimous in favor of eight hours established by law. From England also came a resolution that all nationalities should seek a minimum wage, which would vary in amount according to local circumstances, but should suffice always for decent existence, the education of the children, and a provision for old age. A minimum wage would further be useful, as a Belgian delegate explained, in preventing miners from competing against each other or mine owners from competing at the expense of their workmen. A Scotch delegate moved that employers should be held responsible for all accidents to workmen in their employment, and should be compelled to compensate them from the date of injury. The new English law on accidents had not worked as well as had been anticipated. There were about as many accidents as formerly because the employers insured themselves against risks and were as careless as before. A French delegate, who seconded the motion, declared the

French law, which had at last been adopted after traveling back and forth between the Senate and Chamber for seventeen years, was also unsatisfactory, although better than the English law, inasmuch as compensation was given after four days of disability instead of two weeks. A German delegate explained the German law, under which a workman receives when disabled a pension equal to two thirds of his usual wages without being called upon to contribute to the accident fund, which is collected from the employers by the state, and carelessness is not recognized as a valid excuse for withholding compensation. A representative of the Yorkshire miners moved that all governments should provide pensions for the poor and aged and for those unfit to work from the age of fifty-five. All existing pension schemes were condemned as coming too late into operation and giving too little. The French delegate who seconded the motion explained that pensions were given in France from the age of fifty-five by the law of 1894, but the amount was not fixed, and varied from 1 franc to 2 francs. A Belgian delegate mentioned that the Belgian miner gets only 10 francs a month, and this only after the age of sixty-five, although a third of the miners of the Charleroi coal fields had need of pensions from the age of fifty. Compulsory insurance was

praised by the German delegates as having saved German workmen from the beggary that too often prevails in other countries. The congress was attended by 52 delegates from Great Britain, representing 641,500 miners; 2 German delegates, representing 200,000 miners; 11 French delegates representing 160,000 miners; and 8 Belgian delegates, representing 132,000 miners; making a total of 73 delegates speaking on behalf of 1,133,500 miners.

The annual session of the Inter-Parliamentary Conference was held at the beginning of August. In addition to proposals for the more practical



THE UNITED STATES PAVILION.

The Miners' International Congress chose Paris for its meeting near the end of June. From English miners came the proposal for a legal eight-hour day from bank to bank for workers underground and on the surface. The fact that the Northumberland miners, after having obtained a shorter day for the boys in their mines, had been compelled to give up this advantage in a period of depression, showed that if the miners could gain the eight-hour day without legislation it could not be preserved. The miners of South Wales, who were formerly divided on the question, were

adoption of the convention agreed to at the conference at The Hague several matters for international concord were submitted, notably the creation of a press union for the purpose of influencing public opinion in favor of the pacific settlement of international disputes. In Hungary newspaper groups were already organized for the promotion of peace and arbitration. The South African war could not be discussed because it had previously been so decided, and the English members threatened to withdraw if the subject were introduced. The congress expressed a hope that the just repression of the Chinese massacres would not lead to conquests entailing a general war or to enterprises contrary to the economical, social, and political future of Europe.

The nineteenth conference of the International Law Association met at Rouen on Aug. 21. A question raised at the Buffalo conference of 1899, that was referred for fuller consideration to committees in the United States and in England, was whether private property at sea should be free from capture during war. In the reports of the committees and in the discussion of them in the conference the opposition of the views of European statesmen, both British and Continental, to those of the statesmen of the United States was as decided as when the subject was considered at the international conference of maritime powers at Paris in 1857. The accession of the United States was withheld from the declaration of Paris that enemies' goods in neutral bottoms and neutral goods in enemies' bottoms are free from capture, not because the United States clung to the right of privateering, which the signatory powers renounced, but because the representatives of the European powers would not carry the principle further by adding to the declaration the words "and that the private property of the subjects or citizens of a belligerent on the high seas shall be exempted from seizure by public armed vessels of the other, except it be contraband." At The Hague convention of 1899 the Government of the United States brought forward the question again and endeavored to obtain a decision in favor of the proposition that private property, with the exception of contraband of war, shall be exempt from capture or seizure on the high seas or elsewhere by armed vessels or by military forces, but the exemption shall not extend to vessels and their cargoes attempting to enter a blockaded port. The convention declined to take up the question, as the majority of the delegates of the powers held that it did not come within the scope of their instructions. The American committee of the International Law Association reported in favor of a resolution that there should be a modification of the present rules of naval warfare so far as the right to capture peaceful and nonoffending maritime property is concerned, and that such result can best be obtained by a conference of representatives of all the maritime powers empowered to consider the question in all its aspects. The proposition found support from Italian representatives, and a French delegate suggested an alternate resolution that it was desirable to have the same rules apply to private property on the sea as to private property on land, contending, however, that there is no rule against seizure of private property on land. American delegates held that the law of nations does not justify the seizure of private property on land except contraband of war, unless it be necessary for the belligerent operations or required for military purposes, and they argued that the right to seize at sea non-combatant property not useful for the belligerent's purposes is of little value, as the real method of

destroying an enemy's commerce lies in the right and power of blockading his ports. The British view was that the liability to capture of private property afloat deters nations from going to war and impels them to bring wars to a close, and that its deterrent effect is felt by the most powerful maritime powers as well as the weaker ones. The conference resolved not to advocate a congress of maritime powers to consider the matter and decided not to pass any resolution on the subject. A committee of American and English lawyers appointed at Buffalo to draw up a code of international marine insurance rules adopted, in regard to the test for constructive total loss and the effect of unseaworthiness of the ship on sailing upon her voyage, which are the two most important matters upon which the laws of different nations are divergent, the rules accepted in Continental Europe in preference to the English and American rules. The loss by perils insured against of three fourths of the value of the ship or cargo would, by the rule approved by the committee, be treated as a total loss entitling the insured to payment of the amount of the insurance on abandoning the thing insured to the underwriter. As to unseaworthiness, instead of following the English law, which in a voyage policy infers a warranty of absolute seaworthiness of the ship on sailing, but in a time policy infers no undertaking by the assured even of care to make the ship seaworthy, or the American law, which imposes the strict condition of seaworthiness on the assured whether the policy be for the voyage or for a specified time, the committee recommended the general rule adopted by Continental nations that due care must be taken to have the ship staunch and fit at the beginning of every voyage under the policy. The adoption of the committee's code of rules in the laws of the various maritime states would have the effect of putting all policies, wherever made, on the same legal basis and would remove the obstacles now existing to insuring a ship or cargo by several policies in two or more countries or to reinsuring in other countries. The French members were unwilling to vote on the proposed rules until they could study them in a French version, and therefore action was postponed till the next conference, at which any amendments or substitutions that may be suggested will also be considered.

The Socialist congress was disturbed by the dissensions between the two branches of the French Socialists, the followers of Jules Guesde, the chief organizer of the party, who condemns co-operation with other parties, and especially the acceptance of office by M. Millerand, and the Independent Socialists, among whom are the parliamentary orators Rouanet, Jaurès, Millerand, and Viviani. The challenge was given in the eighteenth annual congress of the French Labor party, which met on Sept. 20. The cleft between the factions was widened by a difference of opinion on the Dreyfus case, which led the Guesdists to join the Anti-Semites. The International Socialist Congress was the successor of the congresses of London in 1896 and of Zurich in 1893, which followed the united Trade Unionist and Socialist Congress of Brussels in 1891, in which the division that led to rival congresses at Paris in 1889 was healed, this division having been caused by the preponderance in the London congress of 1888 of English trade unionists, who made their views prevail over those of the Continental Socialists that planned the international gathering in the conference held at Paris in 1886 and organized the Paris congress of 1886. The congress of 1900 assembled in Paris on Sept. 23. When the French section elected M.



INTERIOR OF THE MANUFACTURES PAVILION, UNITED STATES SECTION.

Jaurès for its president the Guesdists left the hall, but returned and attempted to rescind the action at a moment when the temporary absence of many of their antagonists left them in the majority. The German Socialists told how they had healed such differences twenty-five years before and had become the strongest Socialist party in Europe; the English delegation appealed to the Frenchmen to unite for the purpose of combating colonial expansion, jingoism, and imperialism, just as the British Socialists were unanimous in condemning the Transvaal war; a member of the Italian Chamber of Deputies related how the Socialists of Italy had successfully resisted the reaction which led to the Milan massacre, and after using the weapon of parliamentary obstruction for a year returned to the Chamber twice as strong in numbers when the Government appealed to the electorate; an Austrian delegate told how united the party was in Austria in spite of racial and linguistic differences; and Belgian, Dutch, Danish, Swiss, Russian,

Polish, and American spokesmen each in turn also appealed for union. When the congress got to work at last it passed a resolution in favor of eight hours as the maximum limit of a day's work in all trades, and resolved that the first step to attain this end was to enforce the principle in all public works and contracts. The principle of a minimum wage was discussed as a corollary to this, and, after it was pointed out by the Germans that a fixed rate of wages would be useless unless the prices of the necessities of life could be regulated likewise, it was resolved at their suggestion that it was necessary to maintain minimum rates of wages, varying according to the cost and standard of living in each country, but always sufficient to procure the means of a decent and healthy existence; also that strong trade unions were the necessary agents for fixing and maintaining the minimum wage. The May day holiday as a demonstration in favor of eight hours, universal suffrage, and other reforms advocated by the party in all

countries was approved. Another resolution advocated the formation of a proletariat party which should employ all forms of organization, including trade union and political action, with the object of socializing all the means of production and exchange. Over the question of political alliances it was agreed that the class struggle forbids permanent alliances between the Socialists and other parties, but not temporary co-operation for specific objects or tactical advantages, as in Belgium to secure universal suffrage, in Italy for freedom, and in France over the Dreyfus affair. The entrance of an isolated Socialist into a capitalist government may be expedient as the beginning of a conquest of the public powers, but it should be with the sanction of the party, and such a minister should resign if the Government does not maintain strict neutrality in the struggles between capital and labor.

Closing and Results.—As the exposition drew to a close, special entertainments were provided in order to attract visitors. The night of Nov. 11 was devoted to a fête of illumination. The Châteaueau d'Eau blazed with light, with constantly changing colors, and in the distance the Trocadéro and all the buildings were illuminated, while the gardens displayed their garlands of translucent fruits, and for the last time the assembled people gazed on the luminous waters. Suddenly the lights went out, and the end came; then the people moved toward the gates, and at 11 o'clock the booming of a cannon from the first story of the Eiffel Tower announced that the exposition was no more.

Official statistics show that more than 50,000,000 persons visited the exposition, which is about double the number that attended the exposition of 1889, when 25,121,975 passed the gates. In that year the British and the Belgians outnumbered other visitors, but on this occasion the Germans headed the list, with the Belgians second and the British far behind, while the Americans formed an important contingent. The greatest number of visitors on a single day exceeded 600,000, compared with the maximum of 335,377 in 1889. The greatest attendance at the exposition in Chicago in 1893 was on Oct. 9, when 716,881 persons passed through the gates. As regards expenses, M. Hanotaux wrote: "France expended 200,000,000 or 300,000,000 francs to erect the exposition. She has recovered them easily in the increase of the treasury receipts, in the surplus of Parisian *octroi* duties, in the monuments remaining to the state or the city, and in the quays, bridges, and improved transportation facilities bequeathed by the exposition. Moreover, there has been a general cleaning up of the city, which has contributed to its brilliance and beauty."

An announcement was made on Dec. 15 that the exposition balance sheet showed a deficit of 2,073,786 francs.

Relation of the United States to the Exposition.—In accordance with an act of Congress approved by the President on July 1, 1898, there was appointed a commissioner general to represent the United States, to make all needful rules and regulations in reference to the contributions from this country, and to control the expenditures incident to and necessary for the proper installation and exhibition thereof; an assistant commissioner general to assist and act under the direction of the commissioner general; a secretary to act as disbursing agent, whose accounts were to be rendered to the accounting officers of the Treasury; also 12 commissioners and a number of experts having special attainments in regard to the subject of the groups in the exposition to which they

should be assigned. The necessary expenses were limited to \$650,000. On March 3, 1899, Congress appropriated an additional sum of \$560,000, making a total appropriation of \$1,210,000 for the participation of the United States at the Paris Exposition. At the end of the exposition the commissioner general is required, within four months after its close, to make a full report of the results, which, when printed, should not exceed six octavo volumes.

American Officials.—These were: Commissioner General, Ferdinand W. Peck, Chicago, Ill.; Assistant Commissioner General, Benjamin D. Woodward, New York city; Secretary, Frederick Brackett, Maryland; Commissioners, Bertha Honoré Palmer, Illinois; Brutus J. Clay, Kentucky; Charles A. Collier, Georgia; Michael H. de Young, California; William L. Elkins, Pennsylvania; Ogden H. Fethers, Wisconsin; Peter Jansen, Nebraska; Calvin Manning, Iowa; Franklin Murphy, New Jersey; Henry A. Parr, Maryland; Henry M. Putney, New Hampshire; Alvin H. Sanders, Illinois; Louis Stern, New York; William G. Thompson, Michigan; William M. Thornton, Virginia; Arthur E. Valois, New York; Thomas F. Walsh, Colorado; James Allison, Kansas; also Mrs. Daniel Manning, New York, as a special commissioner to represent the United States and the Daughters of



COMMISSIONER-GENERAL FERDINAND W. PECK.

the American Revolution at the unveiling of the Lafayette statue, and at the Paris Exposition, in accordance with a joint resolution of Congress approved Feb. 23, 1900. Also the following experts, who were placed in charge of groups as designated: Paul Blackmar, of Affairs; assistant, James M. Allen. Frederick J. V. Skiff, of Mining and Metallurgy; assistant, William S. Ward. Francis E. Drake, of Machinery and Electricity; assistant, James S. Anthony. Charles R. Dodge, of Agriculture; assistant, James L. Farmer. Tarleton H. Bean, of Forestry and Fisheries. M. H. Hulbert, of Varied Industries; assistant, William E. Crist. Willard A. Smith, of Civil Engineering and Transportation; assistant, A. C. Baker. Alexander S. Capehart, of Liberal Arts and Chemical Industries; assistant, Charles H. Simms. Howard J. Rogers, of Education and Social Economy. John B. Cauldwell, of Fine Arts; assistant, H. B. Snell. L. M. Howland, of Customs. J. H. McGibbons, of Exploitation and Acting Director of Textiles. In addition to the foregoing, there were about 40 honorary experts and special agents, who served without salaries.

The United States Building.—This stood on the Quai d'Orsay on the Seine, in the Street of Nations, between the Turkish and the Austrian pavilions. It had a frontage of 85 feet and a depth of 90 feet, and the top of the dome was 160 feet from the ground. One of its characteristic features was a classic porch, which opened on the Seine, in front of which was an equestrian statue of Washington, the joint production of the American sculptors Daniel C. French and Edward C. Potter, which was the gift of the women of the United States to France. Its total height was 22 feet, and its weight 8,200 pounds. It was the first bronze statue sent to Europe from the United States. On the vaulted roof of the pylon overhead was a quadriga representing Liberty on the Car of Progress, while a magnificent eagle, with wings extended, surmounted the dome. While the United States Building was regarded as an architectural success, still its unfortunate surroundings so dwarfed it that the effect expected was not realized. The building was formally turned over to the authorities on May 12, when Commissioner-General Peck, surrounded by the members of the United States Commission, welcomed the Commissioner General of the Exposition, M. Picard, while Sousa's band played the Marseillaise. M. Picard was then conducted by Mr. Peck to the center of the rotunda, where a brief formal address was made, after which he presented the Commissioner

General of the exposition with a gold key as a pendant, representing the pavilion, as a souvenir and a suitable response was made by M. Picard. A general reception was held, during which an interesting feature was the playing of American airs by Sousa's band.

Literature.—One of the conspicuous American features was the publication of the Paris Exposition edition of the New York Times, beginning May 31 and ending on Oct. 31. It was under the supervision of Frank M. White, managing editor, assisted by Edward Insley and a staff of associate editors and reporters. The paper was printed on a Goss straight-line press, from type set on Mergenthaler linotype machines, in the American Publishers' Building on the grounds. It appeared every afternoon, at 4 o'clock. For those who desire information in detail, it would be well to consult the file of the daily edition of the New York Times. Special industries may be found described in the various trade journals, some of which, as the Scientific American, contained illustrations. Particularly, the Paris Exposition has been treated in a volume entitled *The Parisian Dream City* (St. Louis, 1900). The reports of the commissioners from the United States will be published by the Government, and special reports of the transactions of the various congresses will ultimately find their way into print, as they did in the case of the Columbian Exposition of 1893.

F

FARMERS' CONGRESS. The twentieth annual session of the Farmers' National Congress was opened at Colorado Springs, Col., Aug. 21. It completed its business in three days, holding three sessions each day. About 800 delegates were in attendance. The leading agricultural States were well represented, but the attendance from New England and the extreme South was not so large as was anticipated. At no other annual meeting has the congress attended so strictly to the business before it; all excursions and other diversions were postponed until the business of the meeting was completed. The meeting was notable for the earnestness of the delegates and the care with which they considered all proposed action.

The meeting was called to order by the Hon. R. G. F. Candage, of Massachusetts, first vice-president and acting president, the president, Hon. William D. Hoard, of Wisconsin, having resigned. Prayer was offered by the Rev. M. H. Fish, of Colorado Springs. Addresses of welcome were made by Mr. Gilbert McClurg, secretary of the Chamber of Commerce of Colorado Springs; Hon. J. S. Robinson, Mayor of Colorado Springs; and Hon. Charles S. Thomas, Governor of Colorado. Responses were made by Mr. John M. Stahl, secretary of the congress; the Hon. Benjamin F. Clayton, chairman of the Executive Committee; and the Hon. J. H. Worst, president of North Dakota Agricultural College.

Mr. McClurg presented figures showing the contribution of Colorado to the wealth of the nation, especially from its mines, and to the work the State was doing for the education of its people and for the advancement of its agriculture. Mayor Robinson said: "Three fourths of the youth in our higher schools of learning come from the farm. It is true also that the large majority of the men who lead in public affairs and in business in our large cities and in the larger arena of national affairs were born and reared in the

country. It is undoubtedly true that country life and environment conduce to physical strength, intellectual power, and moral sanity, and upon these qualities rest the greatness and stability of human institutions. The farms, too, are schools of patriotism. The large cities of our country are our storm centers." Gov. Thomas said: "Did you ever stop to consider that the time has come a few short years when the domain of agriculture has been extended even to the Western seaboard and the waste places of the land have become the garden spot and the granary of the world? True it is, it was the love of gold and the search for the brilliant metals that brought man out into this Western country, but it is the farmer who remained and developed the resources that have made most of our wealth. The farmers took the waste tract of land and have made of it an empire."

Secretary Stahl called attention to the fact that it was our large exports of farm products, so exceeding the exports of all other products, that had made the balance of trade so largely in our favor that we had become a creditor nation; but he hoped farmers would not forget that true national wealth was in the character of the people rather than in money at home or favorable balances abroad. "History shows," he said, "and especially the history of this nation shows, that the source of true national wealth, as of all individual worth, is in the homely home, where God is honored, the Bible is read, and children are taught industry, economy, sobriety, and purity; the home directed by that best thing mortal—the Almighty God has placed on this earth—a pious and tender woman whose titles of love and honor are wife and mother." Mr. Clayton spoke very briefly, contenting himself with pointing out how well Colorado Springs had fulfilled all its pledges to the congress and paying some well-deserved compliments to that city. President Worst explored the rush of young people from the farm

the big city, and the fact that boys and girls who might earn thousands of dollars and fill a truly dignified place in society by putting forth their efforts on the farm are willing to live in the cities on the land, many of them having received elaborate educations, and to work indefinitely at \$800 \$1,000 a year.

President Candage, in his annual address, said that "in importance, magnitude, and value the products of the soil represented by the delegates at this congress overshadow all other interests making for the comfort, happiness, and well-being of our country and its people. . . . I have been greatly impressed by the magnitude and value of one of the minor branches of agricultural industry—that of eggs and poultry. We enjoy the golden-egg cackle of the barnyard fowl as she makes known the fact that she is a national wealth-producer to the annual amount of \$140,000,000. Transportation is of vital importance to the farmer and to the development of interior portions of our country in agricultural and other products. To the railroads the farmers of a large portion of our land are indebted not only for convenience of transportation to their places of abode, but for the value of their farms and the crops they produce. River and harbor improvements of the General Government are of interest to the farmer, for they tend to lower the cost of transportation by competition with the railroads. Whatever conduces to lower freight rates and better security to life and property on land or on the water, the farmer should advocate on the score of economy and for the sake of humanity. The time has come for the farmers, manufacturers, and commercial men to unite and demand from our National Government an American mail service to South America and to other foreign countries, in steamships under our own flag. South American countries are our neighbors and natural allies in trade and commerce, and yet, for lack of direct mail and shipping facilities, Europeans supply them with the bulk of their imported commodities. One half of the amount paid to foreign shipowners for freight on our exports and imports should be paid to American shipowners, and it would be if they could build and sail their ships on equal terms with the foreigner. A canal could be constructed and controlled by the United States to connect the Atlantic and Pacific oceans, for the benefit of our commerce in time of peace and for the benefit of our navy in time of war. The need of the farmer is a better education for his calling—an education that shall equip him with a knowledge of soils and crop adaptability to them that shall produce the best results. The question of closer uniformity in State laws regarding marriage, divorce, inheritance, taxation, mortgage foreclosure, right of redemption, and right of woman to hold and to dispose of her property, is suggested for your consideration."

The Hon. L. Bradford Prince, ex-Governor of New Mexico, paid a high compliment to the president's annual address, and moved that there be appointed a committee of five on the president's address, with privilege of reporting at any time. The motion was adopted.

The following committee on resolutions was selected: P. Mengo, of Arkansas; W. H. Clarke, of Colorado; W. M. Dewees, of Illinois; W. E. Williams, of Indiana; D. F. Hoover, of Iowa; S. M. Knox, of Kansas; E. F. Wetstein, of Kentucky; George M. Whitaker, of Massachusetts; J. H. Reynolds, of Michigan; Isaac Noyes, of Nebraska; R. Demerest, of New Jersey; L. Bradford Prince, of New Mexico; A. R. Smith, of New York; J. L. Garber, of Ohio; J. O. Thomas, of

Oklahoma; E. W. Cooper, of Pennsylvania; J. B. Killebrew, of Tennessee; J. L. Greer, of Texas; J. H. Long, of West Virginia; Spencer L. Gates, of Wisconsin; Elwood Mead, of Wyoming; J. A. Johnson, of North Dakota; G. W. Kroiner, of Virginia; Gov. Keith, of South Dakota; S. O. Bowen, of Connecticut; J. J. Laughinghouse, of North Carolina; George M. Doyle, of Missouri.

Led by Mr. W. G. Whitmore, of Nebraska, the congress decided to transact all its business before going on any excursions or accepting any entertainment.

A short address was made by Mr. F. A. Converse, of New York. He discussed the reasons why the efforts of the farmer should be directed toward an intelligent cheapening of production. He thought the farmer is too conservative. He must change with changing conditions. He should exercise his brains more and his muscles less. With the same amount of industry, brains, and capital as much can be got out of farming as any other occupation. Make the product the best and cheapen production. Let us have better business methods. Run a cash system as far as possible. Interest the boys in a financial way and they will stay on the farm.

At the evening session Alexander R. Smith, of New York, read a paper on our shipping interests. He said: "About 20,000,000 long tons of American agricultural products are annually exported from the United States. To-day the cost of carrying wheat from the Pacific coast to Europe is more than \$10 a ton. A fair profit is possible at \$6. Rates on grain from Gulf ports to Europe are \$5 a ton—about double the normal rate. Foreign ships practically monopolize our foreign carrying trade. On a 30-per-cent. advance in ocean rates the American people have paid \$60,000,000 above the usual freight charges during the past year, of which our farmers have paid half. Legislation that will build up an American merchant marine will, by substantially reducing ocean freight rates, give our farmers larger markets and better profits. Unaided, American ships can not compete profitably with foreign ships possessing the triple advantages of less cost of construction, less cost of operation, and government aid. During the past sixty years Great Britain has paid out more than \$240,000,000 in subsidies to British steamships. If we do not change our policy of national neglect of shipping we shall, in the next quarter of a century, pay out \$5,000,000,000 to foreign shipowners. If the United States will pay in twenty years to American ships in the foreign trade a sum of money no larger than the American people now pay to foreign shipowners in one year, at the end of that period the larger part of our foreign carrying will be in the hands of our own people."

He was followed by Mr. Elwood Mead, of Wyoming, in a paper on irrigation investigations. He said: "In less than half a century irrigation has transformed the appearance and possibilities of the western third of the United States. The very essence of success in irrigation lies in the control and distribution of the water supply. The importance of this was not at first appreciated. The pioneers of irrigation paid no attention to their titles to streams or to the volume used. As a result, the water from streams is not used judiciously. Some ditches have too much water, others have not enough. Even in California, where water is so valuable, there is no adequate record of rights or systematic division of streams among the multitude of users that depend on them. In only 3 of the 15 arid States is water divided under public supervision. It is the opin-

ion of those best informed that the present haphazard development ought not to continue. There are many million acres of irrigable lands yet to be reclaimed. In order to know how much of this can safely be offered to settlers we must know how much water each stream will supply and how many acres of land it will serve. Irrigation laws must be studied. And before development proceeds much further there should be some common agreement regarding the character of a water right."

At the morning session of Aug. 22 the Committee on Resolutions made a partial report, and a memorial on the death of the Hon. A. V. Stout, of Iowa, a member of the congress, was adopted. Col. J. B. Killebrew, of Tennessee, read a paper on the natural resources of the South. He said: "Considered in reference to its capabilities for supplying those products most coveted by civilized nations, this belt may be regarded as the fairest domain in Christendom. No other region of the globe has such a diversity of valuable farm products. It produces 75 field crops and about as many garden and orchard products. Among these are cotton, of which an average of nearly 5,000,000,000 pounds are produced annually. The amount of wheat grown in the South is increasing with satisfactory regularity. The tobacco interests of the South are in a most prosperous condition. A most favorable indication in the agricultural development of the South is seen in the larger number of forage crops that are now produced. Nothing else, however, in the development of the South is so striking as the rapid increase in the growing of fruits and vegetables for the Northern markets. In the 14 Southern States there are 55,279 square miles underlaid by coal seams. In 1899 the South produced 2,500,000 long tons of pig iron. It now makes more iron than the United Kingdom made in 1847, and more than the United States made in 1871. The phosphate beds of Tennessee are the greatest known to mankind."

The hall in which the congress met had not been decorated. Mr. Amos F. Moore, of Illinois, called attention to the fact that the American flag was not to be seen by the congress while in session, which was contrary to its traditions, custom, and spirit; and in an earnest and eloquent address, in which he called attention to the fact that our flag was being attacked in foreign lands, and that our brave soldiers and marines defending it were in danger, he moved that at least one large American flag be provided for the stage. The motion was greeted with prolonged cheers, and the flag was soon placed in position.

Mr. George M. Whitaker, dairy commissioner of Massachusetts, read a paper on dairying. He said: "The particular line of thought which I wish to develop is that the dairyman is a manufacturer, and that the ordinary laws of business apply to him as well as to the manufacturer of cloth or jackknives. The primary essentials in manufacturing are three: First, technical, the know-how in the matter of production; second, executive, the ability to produce at the lowest possible cost; third, commercial, the ability to sell at a profit. I desire to enter a protest against a tendency to treat practice and science as if they were separate and to some extent competing. To my mind they are almost synonymous. If a theory is correct, the practice must be. Correct theory and intelligent practice always agree. Too much idle or unprofitable capital is frequently found in dairying. Cost of production is greatly enhanced in many cases because cows are kept that produce less than good cows are capable of

producing. How shall we restrict the sale of oleomargarine? It seems to me that the most logical and defensible way is to attack the root of the evil—to forbid the introduction of that element which constitutes the fraud, to wit, the color. There is just as much food value in white oleomargarine as in yellow. It is extremely essential that we put all the push we can into enacting section 1 of the Grout bill. Cheese seems to be as near the bottom of the ladder as it can get, and an improvement must come as a consequence. And as the world advances fraud will be less rampant and aggressive."

At this point the Committee on the President's Address reported, strongly commending what President Candage had said on transportation on land, on opening direct mail communication and the establishment of direct ocean freight lines between the United States and South American countries, on an interoceanic canal, on the development of our merchant marine, on agricultural education, and on taxation. The report added to President Candage's discussion of these topics, and it was adopted unanimously.

At the afternoon session Mr. A. J. Lockridge, of Indiana, read a paper on the mission of the farmer. He said: "The mission of the farmer is by no means of an optional character. It belongs, like the sober duties of the churchman, to the need of our common humanity. It is literally an everyday question of bread to the eater. The old wooden mold-board plow, sphinxlike on its perch in the museum, offers suggestive thoughts to the twentieth century farmer. It silently reminds the beholder, as the roar of a great city floats up to his ears, that competition along agricultural lines, glowing just as fiercely as in any part of the business world, must now have the best labor-saving devices with which to work the crops. So, too, its toil-worn parts readily recall the old-time farmer with his meager knowledge of agriculture, and quietly force the conviction of how hopelessly his ways would be handicapped in this swift-moving age. In voiceless but heedful emphasis it tells the spectators that the very best designs in machinery, electric energies, and the keenest insight into commercial labyrinths must surely prevail in the farm management if the farmer is successful and the world properly fed. . . . Such achievements will call unquestionably for their best efforts not only on the farm, but also at the student's desk. When the day is done the glorious task of a student awaits the energetic farmer of the evening lamp. Here he can diligently compare the experiments and observations of the day with the course pursued by expert agriculturists, coupled with his own discoveries, and draw beneficial conclusions therefrom. Such is the farmer's mission: To grasp right motives on the farm; to learn every detail of his business; to answer accurately the grave question why he should know that business to the end that he may follow his mission faithfully, intelligently, successfully."

This was followed by an address by Mr. John P. Brown, of Indiana, upon Agriculture Dependent upon Forests. He said: "The intimate relationship existing between the agriculture of a nation and her forests is but little understood by a large class of citizens. The value of woodlands is greatly underestimated by farmers who are so largely dependent upon their influences. The rainfall upon which we depend for every farm crop has become irregular since the denudation of vast timber areas. Each summer we see protracted droughts with their many and diverse injuries to farmers. After a season the rains come in torrents and cease not, the soil is washed from

the hillsides, deep gullies are cut in the sloping fields. A moderate proportion of forest land, properly distributed, would remedy this great evil, or at least moderate it, by holding back in the spongy soil and leaf mold a portion of the water a time of need. Trees maintain an even temperature, modifying the cold of winter and the heat of summer. Evaporation is rapid where the wind blows strongly over a field. Often the crops are ruined by hot winds, which absorb their moisture more rapidly than their roots can draw it from the earth. Belts of timber, by guiding the air currents upward, overcome this rapid evaporation. Without the shade and shelter of forests the snow melts more quickly, flowing rapidly away in early spring, leaving little for the later and drier season. The State which protects its forests and encourages tree culture, although the present output may seem burdensome, will be a prosperous commonwealth in the years to come. The farmers of America can in no way serve their country better than by perpetuating the noble trees of American forests, securing to posterity a country not devastated by avaricious spoilers, but adorned with the trees so necessary to the comfort and well-being of all people."

Mr. J. G. Springer, of Colorado, president of the National Live Stock Breeders' Association, made a short address, in which he took the ground that the farmer did not know his power or did not care to exercise it, and that he spent too much time in idle grumbling when he should be correcting the justice under which he is suffering. Mr. Springer made a strong argument in favor of giving the Interstate Commerce Commission greater powers. In his opinion the commission did not have enough powers at the beginning, and it had been shorn of what it had until it had become only a very expensive means of collecting some statistics. He attacked the Grout bill, and took the ground that neither State Legislatures nor Congress had the right to ruin an established industry by enacting effective anti-oleomargarine legislation; and he asserted that such legislation would inflict on the stock growers of the country a loss much greater than any loss at oleomargarine would inflict on the butter-makers.

At the evening session a paper on agriculture as a branch of public education was read by Mr. Ethan Brooks, of Massachusetts, who said: "Boys are now taught, under public instruction, the use of mechanical tools. Since the object of public instruction is to enable the rising generation the better to earn a living and to become good citizens; since there is nothing better than home-education to induce the average man to interest himself in good government; since the uncertainties as to constant employment and as to successful business undertakings are so great; since a permanent abiding place is all essential, and a home and a living business can be had most economically in the country; and since we have made the promise that 'while the earth remaineth, seed-time and harvest shall not cease,' is it not a great mistake to neglect instruction in agriculture? We have our agricultural colleges and experiment stations, all doing noble work. Has not the time come when it would be well to adopt the kindergarten idea in these lines of instruction? Let us encourage an education that shall engender a desire for a home where the family may engage in tilling their own ground; beginning, if necessary, in a small way; growing largely their own food supply, including the luxury of a full line of fruits and vegetables known in perfection only to those who gather them from their own grounds

and place them fresh upon their tables, and making year after year improvements which shall so increase the productiveness of the farm that as strength declines the labor of former years may bring its return."

Señor José Romero, of the Mexican legation, Washington, a duly accredited delegate from Mexico, was the first speaker of the morning session, Aug. 23. His subject was General Agriculture in Mexico. A motion for a vote of thanks for his able address was adopted unanimously.

Mr. W. W. Bates, formerly United States Commissioner of Navigation, read a paper on the policy and measures for shipping restoration. He advocated the policy of the early days of the republic toward our shipping and opposed subsidies. He said: "It will take only a few moments of time to prove, presumptively, the incapacity and inefficiency of state aid largely to increase a marine. For this we need not go beyond our own trade. France has been aiding her marine with building and sailing bounties for nineteen years, and Italy has been employing this system for fifteen years. The vessels of both nations run freely in our foreign trade. I will put this question: If the prescription of state aid is as powerful a remedy for shipping decay and as potential in causing growth and development of shipowning and shipbuilding as we are told that it is by the advocates of the pending subsidy bill, how happens it that the commerce of our principal ports has not, in the smallest degree, yet felt effects from the French and Italian policies?"

At the afternoon session was read a paper on Natural Irrigation, by Prof. H. W. Campbell, of Nebraska. "Natural irrigation is secured by a complete rearrangement and pulverizing of the top 6 or 7 inches of soil, and turning it as nearly bottom upward as possible each year. Before plowing the top 4 inches should be thoroughly pulverized. Then this finely fitted surface soil must be turned down into the bottom of a furrow 6 or 7 inches deep. Immediately after plowing, the lower 4 inches of the furrow slice must be packed as firmly as possible with the subsurface packer. The next important step is to go over the ground to pulverize all surface lumps, thus forming a mulch of loose, dry soil. Water can not pass up through loose, dry soil by capillary attraction. Therefore the soil mulch protects the moisture in the root bed from evaporation and saves all the natural rainfall for the use of the plant."

The rest of this day's session was occupied with the report of the Finance Committee, the Committee on Resolutions, and the Committee on New Constitution.

A long series of resolutions was adopted, to this effect: Favoring appropriations for river and harbor improvements; urging the establishment of a direct mail service, in American steamers, between the United States and South America; favoring the construction and control by the United States of the Nicaragua Canal; favoring the Grout bill in regard to oleomargarine; favoring congressional action to restore the American merchant marine; commending the Secretary of Agriculture for his work in collecting and distributing seeds; approving free mail delivery in rural districts; disapproving the proposal to lease public lands for grazing; asking for legislation to reduce the rates charged for use of sleeping cars; declaring that the water of all streams should forever remain public property, and that the right to its use should inhere not in the individual but in the land reclaimed; pledging every effort to make the exposition at Buffalo in 1901

a success; and declaring that Congress should increase the power of the Interstate Commerce Commission.

The committee appointed at the annual meeting in 1899 submitted a new constitution, which after some discussion was adopted unanimously. The most important parts are as follows:

"The membership of this congress shall consist of one delegate for each congressional district and two at large for each State and Territory, and one for each State agricultural college and experiment station, to be appointed by their respective Governors, and one to be chosen by each national or State society or organization created and maintained to foster any agricultural interest in the United States. Provided, that delegates thus chosen shall, when required, produce proof of the standing of their organizations. The delegates thus appointed and chosen shall hold office for two years, and shall constitute the voting membership of this body.

"The Governors of the several States and Territories may appoint such a number of associate delegates as to them may seem wise, who shall have all the powers and privileges of regular delegates except that of voting. In case Governors refuse or neglect to appoint delegates and associate delegates, then the State vice-presidents and secretaries of boards of agriculture, or either of them, shall have power of appointment.

"This congress shall meet annually at such time and place as the executive committee shall determine, and may meet on special occasions, when deemed necessary, to advise, discuss, and perform such duties as may in its judgment advance the interests of agriculture in the United States; but partisan issues and questions involving party politics shall not be introduced nor debated.

"The officers of this congress shall be a president, first and second vice-presidents, one vice-president for each State and Territory of the United States, a treasurer, a secretary and three assistant secretaries, and an executive committee of five, of whom the president and the secretary *ex officio* shall be two, to serve for two years.

"The election of officers shall be in odd years, when the numerals representing the same are not divisible by two without a remainder.

"No compensation shall be allowed by this congress to its members or officers for their expense of attendance upon its annual meeting, but the Executive Committee and other committees appointed with powers may be reimbursed for any expense incurred while in discharge of duties imposed by this body."

As officers were elected in 1899 there was no election of officers at the meeting at Colorado Springs. On the resignation of President Hoard, in May, 1900, First Vice-President R. G. F. Candage, who was elected to that office in 1899, became acting president. Col. John S. Cuninghame, of North Carolina, is second vice-president. The secretary is Mr. John M. Stahl, of Chicago, who is serving for the eighth year in that capacity. His assistants are Mr. George A. Stockwell, of Rhode Island, who has held that office eight years, and Mr. D. C. Kolp, of Texas, and Mr. E. A. Callahan, of New York, both elected in 1899. The treasurer is Mr. Levi Morrison, of Pennsylvania, elected in 1899. The executive committee is the Hon. B. F. Clayton, of Iowa, chairman; Hon. W. G. Whitmore, of Nebraska; Mr. E. F. Wetstein, of Kentucky; Col. T. C. Slaughter, of Texas; and Mr. E. L. Furness, of Indiana.

FEDERATION OF CHURCHES. The subject of federation among American churches has been informally discussed for several years, and

federative agreements relating to local work have been arranged and made operative to a greater or less extent in a number of cities. In May, 1898, the Congregational Association of New York appointed a committee to endeavor to secure the formation of a federation or alliance of the evangelical churches of that State. The Baptist State Convention of New York in October, 1899, likewise appointed a committee on church federation. A conference, attended by persons from different parts of the United States, was held in the city of New York, Feb. 1 and 2, and unanimously approved of a declaration that the time had come "for the institution of a national conference for federation among churches and Christian workers in the United States." In pursuance of another resolution of this conference, a national executive committee of 18 members, composed equally of ministers and laymen, was appointed for the promotion of federation. The Baptist, Congregational, Disciples of Christ, Lutheran, Methodist Episcopal, Presbyterian, Protestant Episcopal, and Reformed Churches are represented on this committee. Some of its functions will be to foster intercommunication between local church federations, with special reference to supplying information in regard to the work in all parts of the country; to provide counsel and promote the organization of city and State federations; to report a plan for the basis of membership in the conference of the next year; to arrange for the conference of the next year, fixing time, place, and programme; and to devise a plan for raising the money necessary to defray the expenses incurred in connection with the work. Other duties are advisory.

In connection with the movement for the federation of churches and about the time of the holding of the conference in February, a statement of Christian doctrine for the demonstration of the essential unity of their churches was signed and issued by a number of pastors in the Borough of the Bronx, New York. This statement set forth the Apostles' Creed, with the sacraments of baptism and the Lord's Supper as of Christ's ordering; declared the Bible to be the inspired word of God; and defined the Church as being "the holy society of believers in Christ Jesus which he founded, of which he is the only head, and in which he dwells by his spirit, so that, made up of many communions, organized in various modes, and scattered throughout the world, it is yet one in him." A plan for federative work within the limits of the borough accompanied the declaration.

A preliminary meeting to consider the subject of federation in the State of New York was held at Albany in July, when it was decided to call a conference, to meet at Syracuse in the fall. This conference met in November, and was attended by accredited delegates of the Baptist, Congregational, Presbyterian Reformed, and Methodist Episcopal Churches and ministers of other denominations. A constitution was adopted for an organization to be called "The Federation of Churches and Christian Workers of the State of New York." The object of this body was defined to be "the promotion of effective co-operation among the churches of the State of New York, in order that their essential unity may be manifested; that the evangelization of every community may be more systematically accomplished; that a means may be found of expressing the united Christian sentiment of the State in regard to moral issues; that the various Christian churches and Christian workers and benevolent activities of the commonwealth may be more completely co-ordinated, and that other appropriate

ends may be secured." Provision was made for State council representing the denominations uniting in the federation work, and local councils federations established in towns and cities of the State, on the basis defined in the articles; while other organizations of Christian workers will be entitled to representation on a basis provided by the executive board. This executive board, of 12 persons, one third of whom are to be chosen each year in alternation, with the officers, will have charge of the work of the federation under the general instructions of the council, and report to the annual meeting in November. The Rev. Dr. H. Stebbins, of Rochester, was chosen president of the federation, and Gov. Theodore Roosevelt and the Hon. William E. Dodge, of New York, were made vice-presidents.

The executive committee, at a meeting held subsequently to the meeting of the council, decided on the institution of definite practical work in behalf of federation during 1901, recognized the value of help received from the National Federation, and requested the Rev. Dr. E. B. Sanford, secretary of that body, to devote a part of his time to the organization of city and county federations in New York State.

National Council of British Evangelical Free Churches.—The National Council of Evangelical Free Churches of England met in Sheffield, March 13. The opening sermon was preached by the Rev. Alexander Mackennall, D. D., Congregationalist. The Rev. C. H. Kelly, D. D., Wesleyan Methodist, was president for the year, and delivered an opening address on the subject "What the Twentieth Century has a Right to Demand from the Free Churches. The report of the organizing secretary, the Rev. Thomas Law, showed that much more had been attempted and much more accomplished in the line of the work of the federation in the past than in any previous year of its history. Forty-four new councils had been formed in England and Wales, bringing the whole number of councils up to more than 600. The federations, the formation of which had been two years previously, were developing rapidly, and had proved their usefulness as a connecting link between the national and the local councils. They now numbered 33. There had also been developments abroad, and communication between the central office and the colonies and the United States had been going on, with furnishing of literature and the visits of distinguished speakers. A conference had been held in the city of New York, Feb. 1 and 2, to consider the formation in the United States of a National Federation of Churches and Christian Workers, and to determine the method and scope of its work. Reports were also given from Cape Town, Durban, Kimberley, and Port Elizabeth in South Africa, at all of which places councils existed; and councils had been formed in New South Wales and Jamaica, and one in Scotland. United missions had been carried on by the two evangelists of the council, and 43 other evangelists had conducted missions in all parts of the country. An increasing number of local councils were undertaking house-to-house visitation, and were adopting the trochial system. Inquiries were being made as to villages without Free Church services, and sessions were agitated as to abuses in connection with charities and educational trusts. Action of councils was described—relative to the tithe bill, the rights of the children in the schools, the relation of the catechism to the school Board in Liverpool, the "tyranny" of Anglican clergy in rural districts; and in opposition to seven-day journalism and Sunday trading.

The new-formed Free Church Girls' Guild, district nursing, and the miscellaneous work done by the several councils were noticed. Free Church services had been held during the preceding summer at five centers on the Continent of Europe. The circulating libraries had been in great demand, more than 300 boxes of books having been forwarded to various councils. The publication department had been very active during the year. The treasurer reported that the receipts from all sources had been £7,947 and the expenditures £4,102; the liabilities amounted to £1,581. The resolution passed on the subject of education embodied a renewed protest "against the injustice, aggravated by recent legislation, by which, in over 8,000 parishes in England, the only public schools available are schools which, though in all cases they are largely, and in many cases almost wholly, maintained by public funds, yet are controlled by the clergy of one denomination and worked in the exclusive interest of one sect; while the religious teaching in a vast number of them is such as grievously wounds the consciences of the parents of Free Church children." The resolutions exhort members of Free Churches, especially those who are electors, not to rest content in their demands for remedial legislation till such provision shall be made as shall bring within the reach of every child in the kingdom "a school under the control of duly elected popular representatives, in which the religious instruction shall be free from sectarian bias; and until teachers and pupil teachers in all state-aided schools and children in all state-aided training colleges shall be free from any theological test." Resolutions respecting secondary education set forth that "in any future organization of secondary education the local authority should be a public representative body, on which the school boards, where they exist, should be largely represented"; approved the method laid down in the report of the Secondary Education Commission for the constitution of the local authority in county boroughs—namely, that one third of the members should be chosen by the borough council, one third by the school board, and the remaining third, half by any university college contained in the borough, or by the central office (Board of Education), and half by co-optation; advised that the administrative authority in counties should be similarly constituted; urged enforcement of the conscience clause and the effective representation of the public on the governing body of the schools in all cases where a grant of public money is made to a secondary school; that no formularies distinctive of any particular religious denomination or denominations should be used in such schools; that in case of denominational boarding schools aided out of public funds parents of other denominations be permitted to establish hostels within their organization, subject to the governing body; that the constitution of the endowed grammar schools be revised, so as to secure their undenominational character and make laymen and Free Church ministers eligible to the head mastership; and demanding provision for the establishment and maintenance by school boards of unsectarian training colleges. A scheme was presented to the council and discussed for the institution of Free Church Girls' Guilds, on which, however, definite action was not taken. A resolution with reference to the Sunday closing of places where intoxicating drinks are sold expressed regret that nothing had been accomplished, notwithstanding an agitation extending over thirty years to give England this boon, which had been acquired by nearly every other part of the empire, and advised

ing the consolidation of the forces of the local councils and district federations with all other means of kindred character to press this measure. A plan was approved for a "simultaneous mission" to be conducted for the whole country, including the large and small towns, and, it was hoped, the villages. It was to be an eight-days' mission, which might in special cases be extended to ten days. In London it was to be held from Sunday, Jan. 27 (1901), to Sunday, Feb. 3, or Tuesday, Feb. 5, and in the rest of the kingdom from Sunday, Feb. 17, to Feb. 24 or 26. The mission is intended for all classes, and the list of missionaries includes practically all those who are regarded as the great leaders of the churches. A resolution was adopted protesting against sacerdotal teaching, ceremonies, and practices, and affirming that in the opinion of the council neither the doctrine nor the discipline of the Anglican Church would be satisfactorily safeguarded until it was disestablished, and its affairs were placed under the government of its own members.

FICTION, AMERICAN. The salient feature of American literature in 1900, as in the preceding year, was the phenomenal success of certain novels, all by American authors, of whom the majority are newcomers in the field. Edgar Allan Poe foresaw the endless possibilities of the American reading world, and planned, before the middle of the century was reached, a popular magazine on the lines later adopted by our great monthlies; but even he presumably had no conception of the more recent developments in cheap periodical literature, nor of the circulation of hundreds of thousands of copies of novels, such as we have seen of late. Susan Warner's *The Wide, Wide World*, the first American novel that might have served as a guidepost to his discerning mind, was not published until a year after his death; *Uncle Tom's Cabin* two years later; and to others the success of neither of these books appears to have suggested possibilities. They were rather regarded as unapproachable exceptions, one of which was helped by extraneous circumstances—the conflict over slavery which was to end in war. Even Edward Bellamy's *Looking Backward*, and Lew Wallace's *Ben Hur*, with its record of nearly 750,000 copies sold, seem to have been classified as sporadic appearances in the field. The idea that audiences could be found for several novels at one time, running well into the millions, was not born until within the past two years. Reputations are now made in a day, and bear fruit in a month; whether they will endure as do those of the older masters, none of whom has as yet been approached in workmanship, remains to be seen. The true artists of the present day, with the exception of Stanley J. Weyman and Anthony Hope Hawkins, do not stand any longer in the first rank so far as circulation is concerned. Mr. Howells, Henry James, Mrs. Wharton, Miss Wilkins—to name but a few, and to restrict ourselves to American fiction—are left far behind in the matter of immediate popularity, if not of enduring fame.

Many theories have been advanced in explanation of this unprecedented growth of the American reading public; and the warnings of the croaker who sees in the vogue of the novel the doom of true literature are, of course, heard in the chorus. No single cause for the movement can be assigned. It is the outcome of many developments in recent years, as diversified as the style, subjects, and methods of the fortunate authors themselves. Publishers and public have interacted upon each other in a complex and highly interesting fashion, the former perfecting their methods of reaching the multitudes of readers,

hastening by legitimate means the spread of publications which formerly dribbled but slowly through; the daily press, ever keenly aware of new interests in its readers, has paid ever increasing attention to things literary, no journal of standing being nowadays without its literary editor and its "book page"; and the international copyright law has unquestionably been an influence in the fostering of the American author, giving him a fair field and an adequate reward for his labors. Moreover, the nation has progressed from union far toward a lasting union with the Spanish war having apparently the considerable merit of adding the keystone to the edifice, all but rent in twain by internecine strife. Seen in their present, and proud thereof, sanguine of their great future, the people of the United States have begun to cultivate their past, to take a deep interest in the beginnings that have led to this great achievement. In a period of historical romance, the patriotic historical novel must not take a pre-eminent place. The national novel, appearing at the time of the full consciousness of an indivisible national feeling, was seen to take a deeply if not long felt want. Finally—and this is perhaps the fundamental cause—that power of agency of modern democratic civilization, the American public school, has begun to yield fruit once denied it—culture; for the American public buys not novels alone. The recent and evidently permanent success of the innumerable cheap but handsome reprints of the classic English literature, the many new editions of Shakespeare, the constant demand for the different home-reading series and popular scientific books for the numerous works on music and art, timely in their writing and launching, the interest manifested in such writers as Spencer, Darwin, Huxley, and Tyndall, far in excess of that shown in the country whose glory they are, testify to the healthy growth of culture in the United States. Statistics of the sales of all these works are published, but they would amply prove, without the truth, that the preponderating mass of the American public does not read for pleasure alone. The success of all such books is not sudden and phenomenal, comprised in the popularity of one or even three years—the life, with but few exceptions, of the present-day novel; it is gradual and cumulative, resulting in the end in a firm faith in the value of literature for him who knows how to interpret them.

In point of immediate numbers, however, fiction overshadows at present all branches of literature everywhere in the world; nor is this fact to be deplored when its growing national significance is taken into consideration. In this country we have passed during the last fifteen years through a series of successive periods of foreign culture. Tolstoi and Turgeneff, Maupassant, Daudet, Gide, and Zola, the Spanish writers and the Scandinavians, even the only notable child of the Dutch sensitivist movement, Louis Couperus, we have gradually forgotten them, as our national school of fiction began to develop. The national note of the schools of all these countries grew in volume. From England we take, and probably shall always take, the lead; she has to give us, for our two literatures are one in essence; but we shall read it for extraneous reasons chiefly, for comparison, social and critical, as a measure of growing or diminishing national divergence.

The growth of the national spirit in the world of fiction is remarkable because it is universal. It coincides with the awakening of national feeling and the preoccupation with national affairs.

most finished of French novelists, the artist who has outlived Bourget—M. Anatole France—is etching pictures of the social life of his country in the present day that probably will endure as mines of information for the future student, and not merely as masterpieces of style and method; but to foreigners, especially to Americans, his books have but little significance, unless they know the country well. The German school, with Sudermann at its head, is intensely national in its expression of discontent with the conditions that are, or in glorification of the empire founded by blood and iron. The modern Scandinavians—Franssen, Jonas Lie, and Selma Lagerlöf prominent among them—are pessimistic psychologists, to be sure, but deal strictly with a national temperament created by conditions unknown beyond their borders. Italy's latest genius, D'Annunzio, is entirely alien to our life and, happily, to our morals, as is also Matilda Serao; while, finally, Russia has not yet produced a genius to wear the mantle of Turgeneff or Dostoevsky or Tolstoi. There, too, the world has moved with rapid strides; national interests outweigh the wider universal ones of an empire conscious at last of its great future. The young Russian writers have felt the trend of public thought and aspiration, Tolstoi himself leading them, for his latest two books are devoted to what will be found, in the last analysis, to be local conditions and abuses, even though he attempts to found upon them, not always securely, his gospel of universal humanity. National, not human, life is evidently to the world's novelists the inspiration of the hour.

These foreign literatures were always alien to us, but we did not realize this fully until the recent revival of our national consciousness. We are young and optimistic and clear-minded; we have no past of unspeakable abuses to sadden our thought and views of life as has the empire which is destined to share the future with us. Our past is one of glory, our present one of prosperity and hope, our future full of promise; and all these phases of our existence are reflected in the novels that have received our suffrages during the past two years.

David Harum came in the nick of time to interpret to us the fundamental unity of our national character as it has come to be. In this son of central New York the people of New England and the Middle States, and, through them, of the South, meet and mingle their characteristics. From the East he draws his humor, in a yellowed form, but not the puritanical spirit; his shrewdness in business largely comes from the same source; his honesty, sensibility, generosity, and moral cleanliness can, happily, not be ascribed to any part of this country alone, nor, it should be added, can his hearty optimism and pagan materialism. As John Oliver Hobbes has said, here is a David Harum in every American family that is American to the core. For this reason he was recognized at once, East and West and North and South, and hailed with delight. He is an individual, to be sure—thanks to his author's art—but, above all else, he is the type of the average American, even fitting the circumstances in which he happens to be placed, capable of rising to any height that fortune and American conditions may offer him. Spiritually he is lacking somewhat, for our sharp struggle for existence has left its influence upon him. But at the core he is sound; a man to rely on in every emergency, a laughing philosopher who takes life as he finds it, and makes the best of it for himself and for others—a good man to know and to love. He never has been observed yet, by the way, that

there is a strong affinity between the wholesome, common-sense philosophy of living preached by Mr. Howells and David Harum's practice. For the author of *The Rise of Silas Lapham* and *A Hazard of New Fortunes* has long been the foremost of our national novelists.

The popularity of Mr. Irving Bacheller's *Eben Holden* is traceable, though to a smaller degree, to the same source. Here, however, the provincial element predominates: Eben Holden is but the type of one of the factors that entered into the ancestry which produced David Harum.

The *Redemption* of David Corson presents—crudely, perhaps, and sensationally, but with unmistakable vigor—the Puritan conscience dormant in most of us, a blessed and invaluable inheritance from the bleak Massachusetts Bay, rarely awakened, happily, because, after all, the life of the average American, like David Harum's, is free from trespasses that are really black sins. This type is not new to our fiction. The *Scarlet Letter* immortalized it, and Julien Gordon realized it dimly in her *Puritan Pagan*, modifying its sternness, however, by cosmopolitan culture and ways of doing and thinking. The Puritan heritage also appears in one of the year's minor successes, Mr. Edwin Asa Dix's *Deacon Bradbury*—a splendid character study, but a novel hampered by a weak plot.

The element of chance in the publishing of books was strikingly illustrated in 1900 by the fate of one of the closest studies of American character in its development during the past quarter century yet published, Judge Grant's *Unleavened Bread*. The book received from the reviewers the attention it deserved and continues to deserve, but its popularity, expressed in the editions sold (about 40,000 copies at the end of the year), fell far short of what might well have been expected for it. Women form unquestionably the overwhelming majority of our novel readers, and many women resented this mercilessly true picture of a type of American woman, which has not yet entirely died out, even though Judge Grant placed his heroine in the early seventies. We have come to regard foreign criticism with indifference, if not with contempt; we are as sensitive as ever to the domestic censor, though we no longer persecute him. Judge Grant's novel has many shortcomings, but these it shares, curiously enough, with nearly all the successes here under discussion. David Harum, Eben Holden, *Unleavened Bread*, and *Deacon Bradbury* are, however, character studies pure and simple, and as such excusable for faulty method. Not so with *When Knighthood was in Flower*, that strange product of a pen lacking all the essentials that go to the making of a historical novel save one, a sense for the romantic.

When Knighthood was in Flower is nothing but a successful appeal to all the world that loves a lover. This is, at least, the only theory by which its popularity can be explained. Two beings, young and supremely handsome, ardent lovers, beset by difficulties, among romantic surroundings, will find sympathizers the world over, as they have done since the art of fiction began, and will do till the end of time. What of a diction that lacks not only every element of style, but is even disfigured by the slang of Cook County in the closing years of the nineteenth century? What of all absence of literary quality, of all distinction? The story's the thing here, and it is not historical, notwithstanding its guise. Its success was made among readers to whom Mr. James Lane Allen's polished method is but wasted effort, and it is not a hopeful sign of the times.

No explanation need be sought for the reception

of Miss Mary Johnston's *Prisoners of Hope*. Here we have good, sound work, interesting characters and situations set against interesting historical backgrounds, the human element in its relation to the making of a people—the right kinds of material used in a masterful manner. Miss Johnston's imagination needs pruning, perhaps, her talent must be trained away from its melodramatic tendencies to yield its best fruit, but hers is work of a high quality indeed, which in the opening chapters of *Prisoners of Hope* rises to the dignity of true literature and gives rich promise. She has a beautiful gift, virile through a woman's intuition at its best, and she is of interest as the first writer of her sex to invade successfully a field monopolized by men from the days of Scott and Cooper to those of Stanley J. Weyman. Woman writers of exuberant imagination we have had ere now—witness Mrs. Radcliffe and her *Mysteries of Udolpho*—but Miss Johnston stands on higher ground, and, with all the embarrassing riches of her fancy, she is a conscientious historian. A place like Mr. Weyman's in contemporary fiction is within her grasp, provided the accident of sex does not at the last moment prove to be an unexpected but insurmountable barrier, for, after all, fighting is men's work.

Mr. James Lane Allen furnishes a striking instance of the results of taking infinite pains. His latest book, *The Reign of Law*, is hardly a novel, if incident, plot, harmonious progress, and ultimate unity constitute a novel. Nor, as a chapter of intellectual life and doubt, of new lamps for old, can it boast of much originality, certainly not of novelty, at this late day. But if Mr. Allen's imagination has lagged for once, if his inventiveness has refused to respond to his call, he has perfected a literary method of such beauty and delicacy that one willingly forgets that he does not give what one expected, and reads willingly on to the end. To say that he is a stylist is but to tell part of the story; he has complete command of all the resources of his craft, which he employs here successfully to hide from all but the hardened professional reader the lack of a truly great subject. Therefore he but arouses the fervent wish that ere long his imagination may return to him strengthened and refreshed. He is a true artist, whose wide recognition and appreciation more than offset the welcome given to *When Knighthood was in Flower*.

This true feeling for literary art was also the cause of the reception of Mr. Winston Churchill's *Richard Carvel*, a novel built upon the soundest, the noblest model of Anglo-Saxon fiction—the work of William Makepeace Thackeray. No copy, whether conscious or unconscious, is ever quite so good as its original, but *Richard Carvel* came sufficiently near it to deceive not only the cultured public to which literature is an intellectual pleasure, or at most an avocation, but also many a seasoned critic. It is Thackerayan even in its length, but where the master trod without hesitation, conscious of his power, the pupil might well have hesitated. The story is unquestionably too long, too deliberate. It drags in many places, it adds no notable character to the living world of fiction, but one can not lightly forget the spirited chapters devoted to *Richard Carvel's* London life, with the ring of true Americanism echoing through them. So, with all its shortcomings, strangely overlooked in the chorus of praise that greeted its coming, *Richard Carvel* is a capital patriotic tonic—not the masterpiece it was at first supposed to be, but a notable milestone early in the road of the new American fiction.

Mr. James Lane Allen and Mr. Paul Leicester

Ford are the only "old hands" in this company of successful novelists. Janice Meredith, too, came at the right moment, though its faults were not readily pointed out than those of the earlier *Richard Carvel*. The critics, at least, had regained their poise. Planned on an enormous scale, embracing the entire period of the War for Independence, the book broke down signally as a novel of adventure. The tale of war and derring-do in its limits, beyond which nothing remains but repetitions of hairbreadth escapes already used by Mr. Ford was led into this fault by lack of further combinations, even as the exuberance of her taste for adventure led Miss Johnston into overdoing this kind of thing toward the end of *Prisoners of Hope*. As a human document, Janice Meredith falls far short of the high standard. Its heroine's character does not develop in the days that tried men's souls, and women's too. As she was in the beginning, so she is at the end of the tale: a shallow, frivolous coquette with no suggestion of the makings of a new woman, of the traditional American Revolution great-grandmother. But Paul Leicester Ford, student of American history, redeems the shortcomings of Paul Leicester Ford the novelist. His book is, above all else, a study of the life of the epoch, the feelings of the colonists, rebels, "loyalists," and "trimmers"—not so much of the leaders, though they, too, are not lacking, as of the country people and their transplanted squirearchy. Mr. Ford's novel is strongest in that one of three interests—the historic, the human, and the adventurous—which at the present time is probably the most important to the American reader, public, the historical one.

The Rev. Mr. Sheldon's *In His Steps* deserves mention merely because no book that finds an audience of a million readers can well be entirely overlooked. It is not literature; it is a tale in the simplest form of that kind of writing. Mere reference to its meteoric career must suffice. It stands beyond the confines of American literature as a sunflower among the weeds of "reading matter"—third class, to adopt the post-office classification—the only practicable one in this case.

The popular books here discussed are abnormally divided between national history and national character, for we may include colonial days in the study of the national history of the United States. When we proceed to give a glance at the recent minor successes we find that history carries the day. Our naval victories in the war with Spain were no doubt largely responsible for the sudden prominence given in fiction to the naval side of our wars. Mr. Cyrus Townsend Brady here stands alone, a popular novelist rather than a trained literary artist—a muscular Christian and an ardent patriot, the biographer, as it were, of Paul Jones, the hero of more than one of our stories. Less successful attempts to exploit the American Revolution have been made within the past two years in vast numbers. They all bear evidence to the same national tendency of the latest fiction, but are remarkable only for the striking revelation of the comparative paucity of the fundamental situations upon which such tales are built—the love of a patriotic maiden for an English officer, a conflict of duty and inclination, and the alarms of war. Adventures and legends on both sides are added according to the whim of the author. The very simplicity of the romance makes its compounding difficult, and success will grow fewer as the attempts become more frequent. Meanwhile we still await a really great tale of the campaign in the Carolinas, of the capture of Pensacola, and Tarleton.

The War of 1812 has thus far been but scantily treated by our novelists. Mr. Brady has dealt with the subject from the naval point of view, and Mr. Altsheler with the war on land in *A Herald of the West*, one of the best books of that kind by a novelist and student. This period, however, appears to be doomed to neglect for the present, since the civil war is plainly to be the next episode in our history to be romantically treated. The lack of a really great novel of the greatest of our times has long been felt, but it was not until 1900 that Mr. Altsheler produced his *In Circling Arms*, evidently the forerunner of a large class of books of its kind. The twentieth century, however young, already feels its distance from the happenings of the nineteenth; sufficient time is now elapsed to allow of judicious, impartial, and final dealing with an episode that long was a tender subject on both sides of Mason and Dixon's line. Historians and novelists will not proceed each other here, but will proceed abreast, and perhaps we shall thus obtain a truer knowledge of the methods of the latter, and of their value as teachers.

No fear of wounding sensibilities still raw, of arousing prejudices hardly quieted, held back our novelists in the case of the war with Spain. It is inspired already one notable novel, but only one, Mr. John Fox, Jr.'s, *Crittenden*, a book breathing a fine and sturdy patriotism, celebrating, above all else, the crowning good that war is supposed to have brought us—the lasting union of North and South, of the Blue and the Gray, the birth of the nation's confidence in its insoluble solidarity.

The novelist as teacher and interpreter—that seems to be the immediate future of our fiction. National history, national character, national life, and national problems—these are to succeed the "problem" novels, "psychological" studies, and "sex" discussions of the immediate past. The improvement will be undoubtedly great, for it will aid us to "find" ourselves, and, having found, to know and understand. The modern novelist no longer wants to be an idle entertainer; and there are many who are willing to be informed while deriving pleasure. The scientific historical method assures them not, theology undisguised does not attract them, and psychology and economics, likewise social studies, can not tempt them. To them the novelist may act as interpreter of the wisdom and knowledge of the day, giving a new function to his art, but assuming also great responsibilities. Technique, already much neglected, will run a serious danger at his hands, for he may forget it for the sake of usefulness. This, however, is a question of the future, which only the future can answer.

Greatest among our national problems is probably that of the negro, not as a dweller on plantations, a picturesque, light-hearted feature of Southern scenery and life, nor as a source of folklore, but as an unassimilated lump in the social body, a possible danger that should be turned into a source of economic strength. Nearly half a century ago the negro inspired the most popular American novel ever written. Will his new contention appeal to another writer, and will that author's influence be as great as that of the little woman who made this great war," as Lincoln said? Will he be a member of the race? Already it has its prophet, laboring indefatigably for its advance, but he is not a novelist. Thus far the negro has shown no remarkable aptitude for letters. He has produced two or three writers of dialect verse and prose, the latest of whom is Mr. Charles W. Chesnutt, linked to the race

by but a single drop of blood. But his first novel, *The House behind the Cedars*, is not a striking performance in workmanship or meaning. Mr. Chesnutt should confine himself to the short story, which introduced him to the American public.

The Chicago school, which is devoted to the study of present-day social and economic conditions, has not yet found its prophet. Mr. Robert Herrick's *The Web of Life*, published in 1900, is one of its best products thus far, but the very complexity of the subject dealt with threatens to dissipate the strength and resources of the authors of this school. Thus far they have confined themselves to reporting the things that are, with their inequalities and apparent injustice. The seer is still to come. Meanwhile this school will probably devote itself in the immediate future to the preaching of the gospel of the new Christian socialism of the West, of which Prof. Herron is one of the chief exponents.

FINANCIAL REVIEW OF 1900. While there was an absence of serious political tension between the European powers during the year, there was more or less of financial derangement at the chief foreign centers, resulting at intervals in comparatively dear rates for money. The war in South Africa, which had closed the gold mines in the Witwatersrand district, deprived Europe of a supply of gold which for the year previous to October, 1899, had amounted to about \$70,000,000. The war involved increased expenditures and consequent large borrowing by Great Britain, and rates for discount at London were maintained at such figures as almost constantly to draw gold, or at least to threaten such withdrawal, from the Continental centers. These centers, it may be noted, were insufficiently supplied, and in order to protect their stocks of gold the Banks of France and of Germany from time to time resorted to measures which tended to keep discounts firm at Paris and at Berlin. These monetary conditions were somewhat intensified early in the year by the discouraging reverses suffered by the British in South Africa. Even after the capture of Pretoria, the Transvaal capital, and the occupation of Johannesburg, the gold-mining center, and of Kimberley, the diamond field, demonstrations by the Boers were vigorous and annoying, indicating an indefinite prolongation of hostilities, the constant menacing of lines of communication, and the postponement of the resumption of gold mining. Though in October Gen. Roberts officially announced that the war was practically at an end, it appeared evident that the pacification of the conquered territory would be greatly delayed, and that until this should be effected there was little prospect of relief to the financial markets of Europe through the receipt of gold in any considerable volume from the Transvaal. Consequently, these markets would be compelled to rely for an uncertain period upon other sources for their much-needed supply of gold.

The disturbances in China, the outgrowth of at least three years of antforeign agitation, which followed efforts by the principal European powers to enforce important territorial concessions from that empire, likewise had an unsettling effect upon the finances of Europe, and at one time serious political disagreements were threatened. The concert, which was early established and which enabled the chief European powers and the United States to adopt measures for the effective relief of the international legations and the occupation of the capital of the Chinese Empire, was, however, happily preserved. At the close of the year it appeared probable that the punitive policy which had then been unanimously agreed upon

at the instance of the United States would be adhered to, and that after this policy had been carried into execution guarantees for future protection of foreign residents in China and of native Christians and agreements providing for trade expansion would be obtained, the later contributing to the development of the vast resources of the Chinese Empire. The necessity which seemed to exist for the maintenance of military and naval establishments by the powers for the purpose of enforcing the terms of the new treaties with China would, however, doubtless require the expenditure of moneys, for the present at least, considerably in excess of the revenues which would be obtainable from the empire, demanding appropriations by individual nations of more or less magnitude, some of which might involve the issue of new loans.

One of the most notable financial features of the year was the negotiation in this country through syndicates of New York bankers of foreign government loans. The first important event of this character was the placing by Russia early in the year of railroad securities to the amount of \$25,000,000, which were guaranteed by the Russian Government, and it was understood that the proceeds of this loan would be employed in the purchase of material for Russian railroads. The British war loan for \$175,000,000, issued in March, was offered in part in this country, and \$12,000,000 thereof was awarded to subscribers in the United States. In August a British Exchequer loan for \$50,000,000 was issued, of which \$28,000,000 was taken by a New York syndicate of bankers. In the following month the German Government placed with another New York syndicate \$20,000,000 of treasury notes, and later a portion of a Swedish loan for \$10,000,000 and securities issued by the free city of Hamburg and by other German municipalities were disposed of in this country. These negotiations amounted in the aggregate to nearly \$100,000,000. The success which attended the efforts of European governments to borrow in the United States seemed to open a new field for the employment of American capital, and it was regarded at the end of the year as quite conceivable that whenever monetary conditions in New York were favorable for such operations there would continue to be opportunities offered by foreign governments for investments by Americans in their loans which would be mutually advantageous. The establishment of a market in this city for dealings in international securities was advocated by representative bankers as likely to afford facilities for transactions in these issues, which operations might eventually become almost as important as are those in the European capitals.

A financial event of the year of vast importance, and which contributed greatly to the prosperous conditions of the country, was the enactment by Congress, in March, of the measure having for its object the maintenance of the gold standard through the establishment of an ample reserve fund of gold, accompanied by provisions for the prompt and effective restoration of this fund whenever it should become impaired. Previous laws, while providing for a reserve, were not mandatory regarding the amount thereof; neither did they specifically provide for the restoration of the fund whenever it should be reduced below the sum which had been generally accepted as the minimum limit of safety. The new law inspired confidence in the ability of a Secretary of the Treasury who was loyal to the gold standard under almost all conceivable conditions to maintain the parity between the gold and the silver obligations of the Government. Though some of the provisions of the law were acknowl-

edged to be imperfect, and capable of being evaded by administrations who might be opposed to the principle embodied in the law, no doubt was entertained concerning its present efficacy. One marked effect of the law was observable in the concentration in the Treasury of a vast amount of gold, much of which had been previously held by banks and institutions, but which, as was the case after the resumption of the issue of gold certificates in 1899, was exchanged therefor at the Treasury, thus making this department the repository of a very large proportion of the visible supply of the metal in the country. These exchanges of gold for gold certificates, the absorption by the Treasury of bullion from the domestic mines and from the Yukon fields, importations of gold from Australia and exports in October from Europe, together with the receipts of gold at the customhouses in payment for duties, caused an addition to the Treasury holdings of gold during the calendar year of \$81,317,224, of which gain \$57,348,336 took place after the passage of the gold standard law. At the end of December the gross amount of gold in the Treasury was \$479,349,251, a sum unprecedented in the history of the country.

The currency provisions of the gold standard law were likewise of great importance. An issue of 2-per-cent. thirty-year gold bonds was authorized for the purpose of refunding \$839,055,250 of currency, bearing interest at from 3 to 5 per cent. and redeemable in coin between 1904 and 1908 inclusive. Provision was made for the exchange of varying premiums of these old bonds for the new 2 per cents., and, with a view to encourage changes by banks who held the old issues as security for circulation, the tax on those circulation notes which should be issued against the 2-per-cent. bonds was reduced to $\frac{1}{2}$ of 1 per cent. per annum. The law further provided for the organization of banks with a capital of \$25,000, and also for the issue by all national institutions of circulation to the par value of the bonds deposited as security. Under the operation of the refunding provisions of the law the exchanges of old bonds for the new 2 per cents. progressed more or less rapidly until the end of the year, when refunding operations were suspended by order of the Secretary of the Treasury. After the final adjustment of pending applications for funding \$445,828,750 of old bonds had been exchanged for new and \$43,568,801 had been paid for premiums on the former. The banks established under the provisions of the law were 389 in number, with a combined capital of \$20,127,000, and the smaller banks were distributed throughout the agricultural regions where they were most needed. Comparatively few banks took advantage of the privilege to issue circulation to the par of their bonds. The increase in bank circulation during the year, however, amounted to \$93,865,887. This gain in circulation, together with the distribution by the Treasury of the above noted amount for premiums on refunded bonds and the maintenance by the Treasury during the year of nearly \$100,000,000 of public funds on deposit with those national banks, numbering 240, which gave bonds as security for such funds, contributed to general monetary equilibrium throughout the greater part of the year.

Commercially the country was wonderfully prosperous during the year. Each month recorded an important excess of exports over imports of merchandise, the smallest of such excess being \$36,782,101, in July, and the greatest \$92,509,219 in October, which sum was never before surpassed. The excess of merchandise exports over imports during the calendar year was likewise the largest on record, amounting to \$648,998,738, and the total ex-

ence of the country, which during the fiscal year ending June 30 for the first time in our history passed the two-billion-dollar mark, being \$2,244,426,666, was \$2,307,102,970 in the current calendar year. Moreover, the imports of manufacturers' material and the exports of manufactured goods were larger than ever before, and our exports were not only greater, but they were more widely distributed throughout the world than in any preceding year. Exports of manufactured goods amounted to \$432,284,366 during the calendar year, and our manufacturers are now successfully competing with those abroad in nearly all the markets of the world.

The enormous excess of merchandise exports over imports in the last four calendar years, amounting to \$2,103,194,933, and the fact that after deducting the visible liquidations, through the movement of gold and silver, of this balance there remains a vast sum unaccounted for except through the return of an unknown amount of checks and bonds, have led to renewed efforts to devise, on a more satisfactory basis than heretofore, estimates of the amount which is known as the "invisible" adverse balance of trade. This balance includes freight, insurance, undervaluations of imported goods, interest on securities held abroad, the amount expended by tourists less the amount which is brought into the country by immigrants, the expenditures by American citizens residing abroad, and other items which necessarily must, as well as the return movement of securities above noted, be estimated. The amount of such "invisible" adverse balance is admitted to be not less than \$150,000,000 annually, and some bankers have given the matter much study claim that it is double this sum. Whatever may be the amount, in order to arrive at an approximation of the actual balance of international indebtedness the invisible annual adverse balance must be deducted from the apparent balance—which is the amount of the excess of exports over imports of merchandise and gold and silver coin and bullion—and the result should show approximately the amount of unliquidated foreign indebtedness upon which to base economic estimates.

The following tabular survey of the economic conditions and results of 1900, contrasted with those of the preceding year, is from the Commercial and Financial Chronicle:

ECONOMIC CONDITIONS AND RESULTS.	1899.	1900.
Money and currency in the United States, Dec. 31.....	\$2,253,133,438	\$2,449,021,009
Bank clearings in the United States.....	\$94,178,080,233	\$86,160,587,352
Business failures.....	\$90,879,889	\$138,495,673
Exports of merchandise (calendar year).....	\$798,967,410	\$829,082,116
Imports of merchandise (calendar year).....	\$1,275,467,971	\$1,478,080,854
Railroad earnings 119 roads (calendar year).....	\$730,883,810	\$786,987,839
Road construction, miles.....	4,500	4,528
Wheat raised, bushels.....	547,903,846	522,229,505
Corn raised, bushels.....	2,078,143,933	2,106,102,510
Cotton raised, bales.....	9,439,539	9,930,270
Iron produced (gross tons).....	13,620,703	13,789,242
Anthracite coal (gross tons).....	47,665,203	45,107,496
Petroleum production, barrels.....	32,207,457	35,475,114
Immigration into the United States (calendar year).....	311,715	448,572

Money.—Influenced by the large customs receipts of the Government during the first four months of the year, which receipts consisted almost wholly of gold, and by accretions from domestic mines, the gross gold holdings of the Treasury gradually increased from \$398,032,027 at the

end of 1899 to \$426,089,371 at the close of April. The withdrawals of gold for export in May were nearly counterbalanced by augmented receipts from the sources above noted, and after the middle of the year gold exports were more than offset by importations at San Francisco of gold from Australia, and in October from Europe, and by bullion from the Yukon, which passed through the Pacific coast assay offices, so that by the end of October these gross gold holdings were \$458,266,143. The amount held at the end of the year was \$470,349,251. The net gold in the Treasury at the close of 1899 was \$236,909,230, while at the end of 1900 it was \$215,719,872, this result being largely due to an increase in gold certificates from \$161,122,797, Dec. 31, 1899, to \$263,629,379 at the corresponding date in 1900. The circulation statement of the Treasury reported that on Jan. 1 the amount of gold was \$617,977,830 and of gold certificates \$161,122,797, while the total of all forms of metallic and paper money in circulation on that date was \$1,980,398,170, making a circulation per capita of \$25.73. The statement of Jan. 1, 1901, shows that the amount of gold in circulation was \$629,192,578, of gold certificates \$232,787,929, and of all forms of metallic and paper money \$2,173,251,879, making a per capita circulation of \$28.19.

The cash holdings of the New York associated banks at the beginning of the year were \$198,996,000, of which \$144,001,700 consisted of specie. These holdings were increased to \$231,594,300 by Feb. 10, chiefly in consequence of a return flow of money from the interior, but they fell to \$205,846,400 by March 24, more or less rapidly recovering thereafter to \$252,950,200, the maximum of the year, Sept. 1, when the specie was \$179,291,900, influenced by the disbursements of premiums upon bonds refunded under the provisions of the act of March 14. Then came a reduction in the cash holdings to \$212,379,000, Nov. 10, caused by the withdrawals of money for the crop movements, followed by a recovery, and the amount held at the end of the year was \$225,073,200. The loans of the banks at the beginning of the year were \$677,797,000, and they gradually increased to \$763,203,100, March 10. After a fall to \$739,331,000, March 24, there was a notable gain due to loans upon fundable bonds and also to hypothecations of securities bought in this market for European account, and the maximum for the year, and indeed on record, was reached Sept. 25, when the loans were \$825,830,000. The reduction of cash above noted caused a liquidation of loans, and they were reduced to \$785,656,500, Nov. 10, after which there was a recovery to \$796,457,200 by the end of the year. Deposits at the beginning of January were \$748,953,100, the minimum of the year. There was a rise to \$829,017,000, March 3, followed by a fall to \$800,116,400, March 24. Then came a recovery to \$907,344,900, Sept. 15, succeeded by a decline to \$831,091,800, Nov. 10. At the end of the year the deposits were \$854,189,200. The surplus reserve was at the maximum (\$30,871,275) Feb. 3, and at the minimum (\$2,686,425) March 17. While the cash, loans, and deposits were advancing during the spring and the summer the surplus reserve increased to \$28,125,950 by Aug. 11. Then came a fall to \$2,947,700 by Oct. 20, followed by a recovery, and the surplus at the end of the year was \$11,525,900.

The condition of the New York Clearing House banks, the rates of interest, exchange, and silver, and the prices of United States bonds on Jan. 2, 1901, compared with the same items for the preceding two years, are given in the following table:

ITEMS.	1899.	1900.	1901.
NEW YORK CITY BANKS:			
Loans and discounts.....	\$713,803,800	\$673,689,400	\$706,457,200
Specie.....	173,442,100	143,496,900	161,719,700
Circulation.....	15,858,200	16,042,700	31,040,900
Net deposits.....	826,881,700	740,046,900	854,189,200
Legal tenders.....	56,908,700	52,682,900	63,353,500
Required reserve.....	206,730,425	185,011,725	213,547,300
Reserve held.....	230,250,800	196,179,800	225,073,200
Surplus reserve.....	\$28,580,875	\$11,168,075	\$11,525,900
MONEY, EXCHANGE, SILVER:			
Call loans.....	2 to 2½	7	6
Prime paper, 60 days.....	3 to 3½	6	5
Silver in London, per ounce.....	27½d.	27½d.	29½d.
Prime sterling, 60 days.....	\$4 82½	\$4 82½ to \$4 83	\$4 81½ to \$1 82
UNITED STATES BONDS:			
4s coupon, 1907.....	113½ bid	115 bid	114 bid
4s coupon, 1925.....	129 bid	133½ bid	138 bid
3s coupon, 1908.....	107½ bid	110½ bid	110 bid
5s coupon, 1904.....	112½ bid	112½ bid	112½ bid
2s coupon, 1890.....	.....	.....	106 bid

Money on call loaned at the Stock Exchange during the year at 25 per cent. in November and as low as 1 per cent. from June to October inclusive. During the first few days in January loans were made at 12 per cent., but gradually the market grew easier, influenced by a return movement of currency from the interior, and by the end of the month the rate fell to 2 per cent. In February the tone was easy, rates declining from 3 per cent. to 1½ per cent., but in March there was an advance to 7 per cent., pending the passage of the new currency law, influenced by the decrease in the surplus reserve of the banks. Thereafter during the month the market was easier, and loans were made at 2 per cent. at the close. In April, influenced by the improved condition of the banks, money was freely offered, and call-loan rates fell from an average of 3½ per cent. to 2½ per cent. The market then began to be favorably affected by the increase in bank note circulation and by the refunding operations, and up to the end of April \$260,783,050 fundable bonds had been presented for exchange into the new 2 per cents., while the disbursements for premiums on the funded bonds were about \$28,000,000. Notwithstanding exports of gold to Europe in May, the money market was easy, call loans ranging from 3 per cent. to 1½ per cent., and averaging 2 to 2½ per cent. The range in June was from 1 to 2 per cent., with the average 1½ to 1¾ per cent. In July, while the range was the same, the average was 1½ to 1¾ per cent., and in August, with an unchanged range, the average was 1½ to 1¾ per cent. It may be noted that on Aug. 18 a call by the Treasury matured for the surrender for redemption of the 2-per-cent. bonds of 1891, which were extended at 2 per cent. and made redeemable at the pleasure of the Government. These bonds then outstanding amounted to \$25,364,500, and they were largely held by banks as security for circulation and public deposits. The surrender of the bonds was slow, however, and at the end of the year there were \$1,207,600 of these securities outstanding. In September, while the range for money on call was from 1 to 2 per cent., averaging from 1½ to 1¾ per cent., the feature was a perceptible hardening of the rates for time money due to the demands from borrowers who desired to make provision for periods beyond the

election, and rates for five to six months collateral loans were 5 per cent. In October money on call was active, ranging from 1½ per cent. early in the month to 6 per cent. by the close, and the activity was almost wholly due to the pending presidential election and to the low bank reserves resulting from the drain to the interior for crop purposes. The average was from 2½ per cent. to 4½ per cent. Time loans were firmly held at 5 per cent. for all periods. In November, immediately previous to the election, there was an urgent demand for money on call to tide over that period, and on the 2d loans were made as high as 20 per cent. and the borrowing was in many cases until the succeeding Wednesday. On the following Monday 25 per cent., the highest of the year, was recorded for loans over the election. On the day after that event, however, money was comparatively plentiful, and it so continued for the remainder of the month, ranging from 2 per cent. to 6 per cent. In December, money on call loaned at the New York Stock Exchange at 6½ per cent. and at 3 per cent., and the tone of the market, until toward the close of the month, was firm, influenced by the absorption of money by the Treasury and by a movement of currency to the interior, which reduced the supply, and by the active stock speculation which increased the demand. In the last week of the month liberal Treasury disbursements for interest and for pensions and free offerings by commission houses who had anticipated some stringency at the end of the year and had therefore made provision with time loans contributed to an easier feeling, though the rate did not fall below an average of 5 per cent. One feature was an inquiry for thirty-day collateral loans at 5 per cent. to tide over the period of expected activity in money in January.

The offerings of money on time during the year were generally confined to local banks and trust companies, though some institutions in near-by cities sought contracts on stock collateral for fixed periods. The buying of commercial paper was, however, largely by banks in the interior, some as far west as St. Paul, and owing to this competition for paper rates, except in January and in October, were comparatively easy. The extremes for the year were from 6 per cent. in January to 3½ per cent. in June for indorsements, and

DATE.	Loans.	Specie.	Circulation.	Deposits.	Legal tenders.
January 6.....	\$677,797,000	\$144,001,700	\$16,234,100	\$748,953,100	\$54,994,300
April 7.....	755,586,200	151,756,200	20,574,500	822,495,600	61,772,500
July 7.....	802,889,900	165,313,900	23,191,800	881,848,900	70,737,500
October 6.....	816,810,700	163,404,100	30,110,800	877,210,900	62,140,500
December 29.....	796,457,300	161,719,700	31,040,800	854,189,200	63,353,500

from 6 per cent. at the beginning of the year to 3½ per cent. in May for first-class four to six months' single names.

The clearings of the New York associated banks in 1900 amounted to \$52,634,201,865, against \$60,761,791,901 in 1899. Clearings of all banks in the country amounted to \$86,160,587,352, against \$94,178,089,233 in the previous year. The clearings on Dec. 27, 1900, at New York were the largest on record, amounting to \$364,013,290. The table at the foot of page 220 is the New York Clearing House statement of bank averages at the beginning of each quarter in 1900 and at the end of the year.

Stocks.—The stock market, though irregular and comparatively inactive at the beginning of the year, gradually developed strength under the lead of New York Central, and the tendency was generally upward for the investment properties to the end of January, influenced by growing ease in money. The speculation seemed to be entirely unaffected by the unsettled London markets in the closing days of the month, caused by news of the disaster to the British forces in South Africa compelling their retreat across the Tugela river after the temporary occupation of Spion Kop. The announcement that the Third Avenue Railroad Company had an excessively large floating debt, and was thereby financially embarrassed, caused a sharp decline in the stock of that company. The continuance of the war between the independent refiners of sugar and the American Sugar Refining Company, together with unfavorable developments at the annual meeting of this company, made the stock exceptionally weak. The tone of the market was generally strong early in February, influenced by declarations of first dividends by several leading railroad companies, notably the Union Pacific, the Baltimore and Ohio, and the Reading, and the speculation was also favorably affected by large purchases of the bituminous coal shares and of stocks of Southern roads, buying of the former being stimulated by the activity in iron and coal and of the latter by a rise in the price of cotton. After the middle of the month a further decline in Third Avenue Railroad stock, in American Sugar, in United States Rubber, and in People's Gas, together with unfavorable bank statements, had a depressing effect upon the general market, inducing speculative sales. There was, however, a partial recovery by the end of the month. Influenced by the passage of the gold standard bill, which became a law on the 14th, and by the absorption by the Metropolitan Street Railway Company of the Third Avenue Railroad, through which provision was made for the adjustment of the enormous loans made by that corporation, the stock market opened quite strong in March, and there appeared to be very confident buying, not only by domestic, but by foreign speculators of leading American railroad properties for the remainder of the month. The European purchases seemed to be directly influenced by the establishment of our currency upon a gold standard, and there were indications, which were observable in the foreign exchange market, that large amounts of the stocks so bought were hypothecated with New York banking houses instead of being shipped abroad. The advancing tendency of the market was checked by realizing sales early in April, and the business was less active while the tone was irregular during the first half of the month. Then it was announced that the American Steel and Wire Company had closed a number of its mills because of a decrease in the demand for its productions, and the executive manager of the company gave expression to quite discouraging views regarding the condition

of the steel trade. The above-noted action of the company and the later reduction in prices of the products of the steel and wire mills in order to dispose of accumulated stocks, together with the request made by the company that deliveries of large amounts of material by the Federal Steel Company be deferred, which request caused that company to close part of its mills, had a demoralizing effect upon the stocks of all iron and steel concerns. These stocks had been greatly advanced in price during the previous month, and the fall tended unfavorably to affect all the industrial properties, and the whole market was more or less unsettled. There was, however, a prompt recovery in the railroad stocks, influenced by easier rates for money and by an improved condition of the bank reserves, which encouraged large purchases of leading stocks at the decline. Moreover, there was a feeling among speculators that the situation in the steel and iron trade had been exaggerated with a view unfavorably to influence the market. Disclosures in the following month, however, indicated that there really was good cause for the action of the Steel and Wire Company, and that the production of steel and of iron had, under the influence of the extraordinarily high prices which had been ruling, been excessive and entirely unwarranted by the demand. Consequently, inquiry by consumers of these goods fell off, and it failed to be stimulated by the general reduction in prices which was made in order to market accumulated stocks. The unsettling effect upon the speculation of the decline in the shares of the iron and steel properties resulting from these disclosures was in some measure counteracted by news of the adjustment of the differences between the local gas companies, by the rehabilitation of the Third Avenue Railroad Company through the issue of new bonds, and by prospects for the settlement of the war between the sugar refiners, and the market irregularly recovered. The failure of an important commission house through an effort to corner cotton had somewhat of a disturbing effect toward the end of the month, and the market was irregular at the close of May. In June the tendency of stock values was generally downward for the greater part of the month. The opening of the presidential campaign was a partially disturbing factor owing to the prospect that the political lines would be closely drawn between the gold standard and free silver coinage, as was the case four years previously. The unsettled condition of industrial enterprises and important declines in steel and iron and in cotton goods had a depressing effect upon manufacturing interests. Unfavorable crop reports and damage to spring wheat in the Northwest more or less affected the status of the grain-carrying roads, and an export movement of gold contributed to speculative selling of stocks. The outbreak of the rebellion in China, the isolation of the legations at Peking, and the military operations by the allied forces, including those of the United States, for the relief of the legations, had a disturbing influence, and tended to repress speculative operations on the Stock Exchange.

The market was quite inactive during July, and though there were recoveries in some of the specialties and a generally firm undertone, the volume of transactions on the Exchange was quite small. The action of the Democratic National Convention at St. Louis clearly defined the free coinage of silver as the paramount issue of the presidential campaign, and some confidence was felt in the indorsement at the election of the existing administration. The crop conditions grew more favorable owing to quite general rains in the Northwest, and the indications pointed to a better yield of

winter wheat than in the previous year. There was no marked improvement in the industrial situation, however, and prices of steel and iron continued to decline without stimulating any special inquiry from consumers. The reports from China regarding the foreign legations were sensational and more or less disturbing until the close of the month, when official announcements were made of an assuring character. Speculation was dormant during August, and the aggregate of transactions in stocks was but little more than 4,000,000 shares, against nearly 13,000,000 in the same month in 1899. The influences contributing to this inactive speculation were the presidential campaign, the generally unfavorable industrial situation, and the uncertainty regarding the crops, though concerning the latter there were assurances of an average harvest of grain. The Chinese situation became less disturbing, the legations having been rescued and Peking being occupied by the allied forces, but complications seemed to be threatened by the attitude of the Russian Government. The tone of the market was, however, generally firm, and there was a good demand for the leading railroad properties, including the trunk lines, the Grangers, the Southwesterns, and the Anthracite Coal shares. Early in September a strike of coal miners in the Pennsylvania regions had a depressing effect upon the stocks of the coal-carrying roads. The market was also more or less unfavorably influenced by a large movement of currency hence to the South and to the Southwest due to the demand for money for the cotton crop, and later considerable sums were sent to Western points to facilitate the marketing of grain. The partial destruction of Galveston by a hurricane, involving the loss of nearly 2,000 lives and of millions of dollars' worth of property, was one of the notably unsettling events of the month, chiefly, however, affecting the cotton situation. The results of the State elections in Vermont and in Maine seemed to give some assurance of increased sound money majorities at the presidential election, which feeling was partially reflected in the stock speculation, but the volume of business was comparatively small and the trading was almost wholly professional. After the middle of the month large speculative sales of the Anthracite Coal shares, of the local traction stocks, of the industrials, and of the trunk line properties made the market generally heavy, but toward the end of the month some progress in the movement for the settlement of the anthracite coal strike caused a covering of short contracts, and the tone was generally better thereafter to the close. The tendency was upward early in October, notwithstanding the efforts of labor agitators to prevent the adjustment of the differences between the coal miners and the operators. The prospect of dearer money resulting from the continued movement of currency to the interior seemed to have little effect, for there was a very confident feeling that higher money rates would cause such a fall in foreign exchange as to bring comparatively large amounts of gold from Europe. The notably strong stocks were Missouri Pacific, Union Pacific, Chicago, Burlington and Quincy, the trunk lines, and the local traction issues. After the middle of the month the market became active and buoyant, influenced by assurances of the re-election of President McKinley, by engagements of gold in Europe for shipment hither, by the settlement of the anthracite coal strike, and by investment purchases of leading railroad properties, including the principal trunk lines. Buying of railroad bonds was a notable feature of the movement, and the transactions in these were unusually large. The buoyancy continued during the greater part of the

fourth week of the month, encouraged by increasing confidence in the political situation, by a smaller movement of currency to the interior, and by receipts of gold from abroad. The daily transactions were quite large and the buying was especially noticeable in Metropolitan Railway and also in Brooklyn Rapid Transit, the latter on reports of a prospective change in the management. Great Northern and Southern Pacific were exceptionally strong, and there was an increasing demand for railroad mortgages, indicating investment purchases. A sharp upward movement in Pacific Mail gave color to a report that Southern Pacific interests would be represented in the management. In the last days of the month there was a natural downward reaction in the market, due to profit taking, and though there was a very confident feeling regarding the result of the presidential election, a disposition was manifested by nonprofessional speculators to await the event. A sharp advance in rates for money, which appeared to be wholly due to the November settlements, tended somewhat to limit the volume of business, and about the only notable feature was a rise in Pennsylvania on the announcement of an extra dividend of 1 per cent. The activity in money on the Friday and on the Monday previous to the election checked operations in stocks except by the professionals, but the tone of the market was generally firm. The feature on the day after the election was a sharp advance in the whole list, with enormous transactions both for domestic and for European account. Some of the foreign arbitrage houses cabled purchasing orders to London on the previous night for execution on the "curb" at that center on the following morning, and these purchases materially aided in imparting a buoyant tone to the foreign markets for American securities. Though there were large realizing sales in the New York market during the day, the offerings were promptly absorbed and the volume of transactions was almost unprecedentedly large at well-sustained advances. The tendency was uninterruptedly upward until the 12th, when there was a reaction due to realization, followed later in the week by substantial recoveries, and some of the leading stocks sold at the highest prices recorded in recent years. The business on Monday, the 12th, it may be noted, was the greatest ever reported at the Exchange, amounting to 1,688,250 shares of stock and \$5,335,000 bonds. The transactions in the following week were also large, aggregating 7,167,745 shares of stock, against 6,720,025 shares in the preceding week, and the exchanges at the Clearing House, reflecting this enormous business, were for the week ending Nov. 24 unprecedentedly large, amounting to \$1,589,530,179. The market, though less active and somewhat irregular owing to realizations and London selling, was generally strong to the close of the month. In December there was very confident buying of stocks, influenced by the generally prosperous conditions prevailing, which were reflected in augmented railroad earnings promising increased dividends. One important event of the month which had a direct effect upon the speculation in the coal shares was the announcement of the purchase of the Pennsylvania Coal Company by capitalists largely interested in the anthracite coal properties. Another event was a conference of railroad presidents with the object of devising plans for the maintenance of rates. Rumors of combinations of important railroad interests in the West and Northwest also had a stimulating effect upon the market. Notwithstanding enormous sales of stocks, chiefly high-priced properties, by Europeans, the market appeared readily to

absorb these stocks, and the tendency was generally upward to the close of the month. On the 2d the transactions on the Exchange were unprecedentedly large for a half holiday, amounting to 1,005,519 shares, and the sales for the week ending that day were 7,775,640 shares, exceeding in amount any previously recorded. For the seven weeks ending Dec. 21, including the week ending Nov. 9, the transactions in stocks were 38,096,044 shares, and the tone of the market during this entire period was almost uninterruptedly strong and at times remarkably buoyant. Total sales of stocks at the New York Stock Exchange in 1900 were 138,380,184 shares, against 176,421,135 shares in 1899, 112,699,957 in 1898, 77,324,172 in 1897, 4,490,643 in 1896, 66,583,232 in 1895, 49,075,032 in 1894, 80,977,839 in 1893, 85,875,092 in 1892, 69,311,689 in 1891, and 71,282,885 in 1890.

The following shows the highest prices of a few of the speculative stocks in 1899, and the highest and lowest prices in 1900:

STOCKS.	1899.	1900.	
	Highest.	Highest.	Lowest.
American Sugar Refining Co.	182	149	95½
American Tobacco	229½	114½	84½
Brooklyn Rapid Transit	137	88½	47½
Central New Jersey	126½	15½	11½
Chicago, Burlington and Quincy ..	149	144	119½
Consolidated Gas	223½	201	164
General Electric	132	200	120
Louisville and Nashville	88½	89½	62½
Manhattan Elevated	139½	116½	84
Missouri Pacific	82½	72½	3½
Wabash	126½	126	110
Pacific Mail	55	57	25½
Reading	25	26	15
Rock Island	12½	122½	102
St. Paul	130½	142½	108½
Southern, preferred	58½	73½	49½
Tennessee Coal and Iron	126	104	49
Union Pacific	51½	81½	44½
Western Union	98½	98½	77½

The following table shows prices of a few of the leading stocks at the beginning of the years 1899, 1900, and 1901:

STOCKS.	1899.	1900.	1901.
New York Central	123	132½	147½
St. Paul	14½	11½	27
Lake Shore	196½	197	240
Chicago Central	109	104	106
Rock Island	114½	107	121½
Northwestern, common	142½	114	172
St. Paul, common	12½	168	147½
Delaware, Lackawanna and Western ..	157½	178	193½
Central New Jersey	98	119½	147½

The Crops.—The condition of the cereal crops was somewhat unfavorable early in the year, owing to the backward season, which delayed sowing operations, and also to winter killing of fall-sown wheat. Conditions were, however, by no means uniform, wheat being at a low average in Ohio, Michigan, and Indiana, and high in the Northwest, on the Pacific coast, in Illinois, and in Kansas. Conditions improved later in the spring, far as regards winter wheat, but spring-sown

grain was unfavorably affected by drought. The harvest of fall-sown grain, which began in June, was excellent in Texas, Kansas, and Oklahoma, and the indications then pointed to a crop of winter wheat at least 50,000,000 bushels in excess of that in the previous season. The damage to spring wheat was greatest in the extreme Northwest, but the July report of the Department of Agriculture showed that the largely increased yield in Kansas and in other States in that section would, to a considerable extent, offset the loss in Minnesota and in the Dakotas. The condition of corn was then reported better than at the corresponding date in 1899, while the cotton crop outlook was good. Corn declined in condition during the latter part of the summer, in consequence of the hot weather, but as the acreage was larger the yield was expected to be above the average. Official estimates of the results of the combined wheat crops were but little below the output of the previous year. At the end of the season the final estimates of the Department of Agriculture indicated a yield of 2,105,000,000 bushels of corn, of 522,229,000 of wheat, of 809,126,000 of oats, of 59,000,000 of barley, and of 24,000,000 of rye, and the striking feature of the estimates was that the grand total of these cereals was 3,519,879,770 bushels, against 3,518,988,796 in 1899. The yield of wheat was unexpectedly good, and the results were phenomenal in Kansas and in other States in that locality. The estimates of the yield of cotton were from 9,900,000 to 10,500,000 bales. The Department of Agriculture based its calculation of a crop of 9,930,270 bales of cotton upon an acreage of 25,038,000 and a yield of 194 pounds per acre. The largest crops were raised in Texas, Georgia, Alabama, Mississippi, South Carolina, Arkansas, Louisiana, and North Carolina. The smallest crops were in Virginia, Missouri, and Florida. The table at the foot of this page shows the yield and the value of the crops for the years 1899 and 1900 on the basis of the price at New York at the beginning of 1900 and 1901.

Foreign Exchange.—The exports of domestic and foreign merchandise for the year ending Dec. 31, 1900, were \$202,582,883 above those of 1899, and the imports of merchandise were \$30,084,706 greater. The excess of merchandise exports over imports for the year was \$648,998,738, against \$476,500,561 for 1899. The excess of exports over imports of merchandise and gold and silver coin and bullion for 1900 was \$662,856,506, against \$493,162,816 in 1899. Gold imports were \$12,603,402 in excess of exports in 1900, against \$5,955,553 in 1899.

The foreign exchange market was influenced early in January by a fall in open market discount rates in London, reflecting easier conditions prevailing at that center, which caused a reduction in the Bank of England minimum rate on the 11th from 6 per cent. to 5 per cent. Concurrently there was a reduction by the Bank of France in its rate from 4½ per cent. to 4 per cent., and by the Bank of Germany from 7 per cent. to 6 per cent., and later to 5½ per cent. Still another influence affecting exchange was the withdrawal by

PRODUCTS.	CROP OF 1899.			CROP OF 1900.		
	Yield.	Price, Jan. 2, 1900.	Value.	Yield.	Price, Jan. 2, 1901.	Value.
Wheat, bushels	547,303,846	\$0 75½	\$413,898,533	522,229,505	\$0 82½	\$431,492,128.50
Rye, bushels	2,078,143,933	40½	849,441,323	2,105,102,516	46½	970,978,535.50
Oats, bushels	9,439,559	7½	240,859,558	9,930,270	10½	492,665,490.00
Total values			\$1,604,199,414			\$1,895,136,154.00

the Bank of England on the 9th of its offer to make advances at the rate of 2½ per cent. on gold while it was in transit from New York, which offer had stimulated the export of gold hence to London in the previous month. The tone of the market was generally strong at the gold export point for sight sterling during the first week, and then \$3,900,000 gold was shipped to London. In the following week, however, rates gradually fell off, to react in the succeeding week. Then the Bank of England further reduced its rate of discount to 4½ per cent., and again, a week subsequently, to 4 per cent., when the Bank of France lowered its rate to 3½ per cent. The supply of bankers' and also of commercial bills was limited, and there was a good demand to remit for stocks sold for European account and some inquiry for mercantile remittances, which kept the market firm. In the last days of the month, influenced by the derangement in London caused by the news of the British disaster at Spion Kop, South Africa, rates for sight sterling advanced to the gold exporting point, though none of the metal was shipped. Rates for exchange at the opening of the month were \$4.82½ to \$4.82½ for sixty-day and \$4.87½ to \$4.87½ for sight, while at the close of the month they were \$4.84 to \$4.84½ for the former and \$4.87½ to \$4.87½ for the latter, the difference in the quotations for sixty-day reflecting the reduced rates for discounts in London. The market was dull and the tone easier, especially for long sterling, in February, influenced by a better supply of commercial bills chiefly drawn against cotton, which was then bought freely by English spinners who had deferred purchases earlier in the cotton season because of erroneous estimates of the volume of the crop. Short sterling, however, was generally firm until after the middle of the month, affected by a demand for remittance, but toward the close this class of bills yielded to free offerings of drafts against securities and the market was weak. Rates for exchange at the beginning of the month were \$4.84 to \$4.84½ for sixty-day and \$4.87½ to \$4.87½ for sight, while at the end of the month they were \$4.83½ to \$4.83½ for the former and \$4.86½ to \$4.87 for the latter. The tone of the market continued easy in March until after the third week, influenced by an increasing supply of drafts against cotton, the exports of which were large. After the 22d, however, the market grew firmer, affected by a scarcity of bankers' bills, notwithstanding the fact that, stimulated by the enactment of the gold standard law, there were large purchases in our market of securities for European account. It appeared, however, that the stocks so bought by foreigners were not sent forward, but they were temporarily hypothecated with the New York banking houses in order to take advantage of the lower rates for money ruling in our market compared with the discount rates abroad. Had the stocks been promptly forwarded, as is usually the case when such purchases are made, the resulting supply of drafts against the securities would have been abundant, and lower rates for exchange would have ruled. Concurrently with this scarcity of bills there was a demand for exchange to transfer bankers' balances to London for employment at that center at more profitable rates of interest than could be obtained in New York, and hence exchange gradually advanced and the tone was strong to the end of the month. The opening rates were \$4.83 to \$4.83½ for sixty-day and \$4.86½ to \$4.86½ for sight. After falling by the 22d to \$4.82 to \$4.82½ for the former and to \$4.85½ to \$4.85½ for the latter, there was a reaction by the close to \$4.82½ to \$4.82½ for sixty-day and \$4.86

to \$4.86½ for sight. The tendency of the market was almost continuously upward during April, influenced by the scarcity of bills resulting from the above-noted retention of securities bought for foreign account, by the demand to transfer balances to London, and also by an investment inquiry for long sterling. Two consignments of gold of \$500,000 each were shipped hence to Buenos Ayres, London account, and on the 26th \$500,000 gold was sent to Paris in consequence of the inducement of an offer by the Bank of France of interest on the consignment while it was in transit. The rate for exchange at the opening of the month was \$4.82½ to \$4.83 for sixty-day and \$4.86½ to \$4.86½ for sight, while the closing rates were \$4.84½ to \$4.84½ for the former and \$4.88½ to \$4.88½ for the latter. The influences operating during April continued to affect the exchange market in May, and for the greater part of the month sight sterling ruled very near to the gold exporting point, though no gold was shipped to London. The Bank of England early in the month raised its bid price for American eagles from 76s. 3¼d. to 76s. 4d. per ounce, but this movement failed to attract gold to London. Shipments of the metal hence to Paris continued, however, in response to the above-noted inducement of interest while in transit, and by the 24th \$10,022,375 had been shipped. The receipt by the Bank of England of £1,000,000 gold from Russia with which to meet interest payments had the effect of so far relieving the monetary tension at London as to cause a reduction by the Bank on the 24th of its minimum rate of discount from 4 per cent. to 3½ per cent. On the following day the Bank of France reduced its rate of discount from 3½ per cent. to 3 per cent., and at the end of the month open market rates were easy at the chief European centers, and the relaxation of the monetary tension abroad was reflected in lower rates in the foreign exchange market. Quotations at the opening of the month were \$4.84 to \$4.84½ for sixty-day and \$4.88½ to \$4.88½ for sight. The former advanced to \$4.84½ to \$4.85 the 14th, but at the end of the month rates were \$4.84½ to \$4.84½ for sixty-day, while those for sight were \$4.87 to \$4.87½. The export movement of gold to Paris was resumed about the middle of the month of June, and some of the metal was sent to Berlin, there being a good demand for gold from Continental centers, the Bank of France continuing to offer inducements to shippers and the Bank of Berlin likewise seeking to attract the metal. The shipments to these points amounted to \$7,026,413. The rates for exchange at the opening of the month were \$4.84½ to \$4.84½ for sixty-day and \$4.87 to \$4.87½ for sight. There was a gradual advance in the former to \$4.85 to \$4.85½ and in the latter to \$4.87½ to \$4.87½, but at the close of the month rates were \$4.83½ to \$4.84 for the former and \$4.86½ to \$4.86½ for the latter. Exports of gold were temporarily checked after the 23d, but they were resumed in July, and the 19th \$2,029,543 was sent to Paris. The extremely low reserve of the Bank of England early in the month seemed to indicate a movement of the metal hence to London, but none was shipped. The bank on the 19th advanced its rate of discount from 3 per cent. to 4 per cent. in consequence of the new phase of the Chinese situation, which had then developed, and open market discounts in London were thereafter firm because of the announcement of the supplementary Treasury estimates of £11,500,000 due to the prolongation of the war in South Africa. Influenced by the monetary tension in London, and also to some extent by the Chinese situation, which tended to check the supply of commercial bills against exports

cotton goods to the Orient, the foreign exchange market was strong in July and rates opened at \$4.83½ to \$4.83½ for sixty-day and \$4.86½ to \$4.86½ for sight. The former advanced to \$4.84 to \$4.84½ and closed at \$4.83½ to \$4.84, while the latter rose to \$4.87½ to \$4.88 and closed at \$4.87½ to \$4.87½. On Aug. 7 subscriptions for a British Exchequer loan for £10,000,000 at 3 per cent. were simultaneously opened at the Bank of England and at the banking offices of J. P. Morgan & Co. and of Baring, Lagoun & Co., in this city, and the books were closed on the same day after more than \$55,000,000 had been subscribed in New York. On the following day it was announced that \$28,000,000 of the loan had been awarded to American subscribers by the advice of the Bank of England, the governors of which pointed out to the Chancellor of the Exchequer that this large award was an easy and a natural way of attracting gold to London; otherwise the bank might have to raise its rate of discount to 5 or 6 per cent., and to take extraordinary measures to bring gold to England. It was stipulated in making the award to American subscribers that \$10,000,000 of the \$28,000,000 should be immediately remitted to the bank. This institution offered the inducement of interest on additional consignments of gold while in transit, and at the same time the bank advanced the bid price for American eagles to 76s. 5d. and of gold loans to 77s. 10d. per ounce. Stimulated by these inducements, \$17,386,227 gold was shipped to London during the month, and the Bank of France contracted \$2,008,907 through the offer of interest on the consignments while in transit. The foreign exchange market was strong prior to the announcement of the award of the Exchequer loan. Then under the influence of offerings of bills against gold exports, and also of a decline in open market discount rates abroad, rates receded, but later the tone again became firm. Quotations opened at \$4.83½ to \$4.84 for sixty-day and at \$4.87½ to \$4.87½ for sight. There was an advance in the latter to \$4.88½ to \$4.88½, but the market closed with sixty-day at \$4.84½ to \$4.84½ and sight at \$4.87½ to \$4.87½. It may be noted that the shipments of gold to London were almost wholly covered with cable transfers, which at the beginning of the movement were \$4.88½ to \$4.89, later declining to \$4.88 to \$4.88½. In September the placing in this country, through the National City Bank and John, Loeb & Co., of an issue of 80,000,000 marks 3-per-cent. treasury notes of the German Empire and of a portion of \$10,000,000 4- to 3½-per-cent. Prussian Government bonds had more or less influence upon the foreign exchange market early in the month, though no gold was remitted for these subscriptions, settlements being made with exchange drawn against credits at Berlin. After the announcement of the German loan exchange fell off sharply, influenced by a liberal supply of cotton and grain bills. The Galveston disaster on the 8th was followed by the report on the 10th from the Department of Agriculture, which showed a decline in the general average condition of the crop during August. As the result of this report and also of the hindrance to the movement of cotton in Texas, by reason of the disaster at Galveston, the price of the staple sharply advanced from 9½ to 11 cents per pound, and in Liverpool no corner developed, but this corner was broken by an agreement by Manchester spinners to refrain from buying American cotton during the month. European purchases of the staple were, however, large, and the resulting drafts continuously affected exchange. Rates opened at \$4.84½ to \$4.84½ for sixty-day and \$4.87½ to \$4.87½ for sight, and closed at \$4.82½ to \$4.82½ for the former and

at \$4.85½ to \$4.86 for the latter. The liberal offerings of cotton and grain drafts, together with activity in money at this center, caused by the withdrawals of funds for the handling of cotton at the South, resulted in a gradual decline in rates for exchange to the gold importing point toward the middle of October. The engagements of gold for import from Europe, began on the 9th, and before the close of the month nearly \$9,000,000 had been engaged from London, Paris, and Berlin, and it is noteworthy that one consignment of \$2,500,000 in American gold loans, which had been shipped from India for the Bank of England, was intercepted at London and transshipped to New York. At the opening of the month the rates for exchange were \$4.81½ to \$4.82 for sixty-day and \$4.85½ to \$4.85½ for sight. The rates at the close were \$4.80½ to \$4.80½ for the former and \$4.84 to \$4.84½ for the latter. The lowest rates for the month were \$4.80 to \$4.80½ for sixty-day and \$4.83½ to \$4.83½ for sight. Active money and an indisposition on the part of foreign bankers to operate in view of the pendency of the presidential election made the exchange market weak during the first few days of November, and on the 5th sales of sixty-day bankers' bills were made at \$4.79½ and of sight at \$4.83, the lowest rates for the year. On the day following the election there was an urgent demand for exchange to remit for stocks which had been bought in London for New York account, and, influenced by a continued inquiry for this purpose, the market was strong to the end of the month. It was then estimated that since the election about \$50,000,000 of stocks which had been bought in London or sold in the New York market through arbitrage houses for European account had been remitted for, and almost every incoming steamer during November brought American securities from Europe. Though the tone of the market was weak early in December, influenced by comparatively firm rates for money, there was a recovery after the middle of the month caused by more or less of an urgent demand to remit for stocks imported and those which were sold in this market for European account. The increasing tension in the monetary situation at London, foreshadowing an advance in the Bank of England rate of discount, induced a covering of short contracts in sterling toward the close of the month, when the tone was quite strong. Rates for sixty-day sterling opened at \$4.81½ to \$4.82, fell by the 17th to \$4.80½ to \$4.80½, and reacted by the end of the month to \$4.81½ to \$4.81½. The rates for sight sterling opened at \$4.85½ to \$4.85½, declined to \$4.84½ to \$4.84½ by the 17th, and recovered to the opening figures by the close of the month.

Railroads.—Earnings of the principal lines of railroad showed general gains throughout the year, and rates were well maintained with few exceptions. One of the most important events early in the year, affecting the chief transportation lines, was the advance in freight rates, through changes in classification, which advance went into effect in January. Subsequently there was an agreement to abolish commissions on passenger business beginning with February. The Lake Shore acquired control of the Lake Erie and Western in January; the Great Northern announced an additional issue of stock; the Chesapeake and Ohio passed under the joint control of Pennsylvania and Vanderbilt interests; and the State of Massachusetts sold its holdings of 50,000 shares of Fitchburg common stock for \$5,000,000 in 3-per-cent. bonds of the Boston and Maine road. In February the Cleveland, Cincinnati, Chicago and St. Louis resumed dividends on the common stock, the Cen-

tral New Jersey increased its quarterly dividends, the Canadian Pacific enlarged its dividend, the Baltimore and Ohio, the Union Pacific, and the Reading first preferred began paying dividends, and Kansas City, Fort Scott and Memphis resumed such payments after suspension since 1893. In March the Pennsylvania acquired an interest in the stock of the Norfolk and Western; the Chicago and Alton bought the northern and the Illinois Central the southern divisions of the St. Louis, Peoria and Northern, which was sold under foreclosure; the Fitchburg stockholders voted to lease the road to the Boston and Maine, and the Metropolitan Street Railway Company of New York bought control of the Third Avenue Railroad line, and subsequently leased it. The Pennsylvania, which had early in the year issued \$12,930,500 new stock at par, issued in April \$9,464,500 more stock on the same terms; the Chicago and Alton Railway Company was organized to take over the Chicago and Alton Railroad and its recent acquisition; the Southern Pacific acquired the Louisville, Evansville and St. Louis, the Houston, East and West Texas, and the Carson and Colorado roads; the Seaboard Air Line was organized with \$75,000,000 bonds, \$25,000,000 common stock, and \$37,500,000 preferred stock, and the Northern Pacific made arrangements to acquire the St. Paul and Duluth. In May the Chicago and Alton Railroad declared an extra dividend of 30 per cent. on its common and preferred stock, and the Chicago and Eastern Illinois and the Lehigh Coal and Navigation Company increased their regular dividends. In the following month the Rutland and the Hocking Valley likewise increased dividends, and the Lake Erie and Western resumed dividends on the preferred stock. In July Illinois Central and Union Pacific, and in August Kansas City, Fort Scott and Memphis, declared additional dividends, these declarations and those above noted indicating prosperous railroad conditions. In October the trunk lines decided to advance grain rates between the Mississippi river and the seaboard. After the presidential election there were indications that plans which had long been in contemplation, looking to the improvement of the railroad interests of the country, had been awaiting this settlement of the political and the financial situation. The Northern Pacific voting trust was dissolved and the common stock was placed on a 4-per-cent. basis; the Southern Pacific bought control of the Pacific Mail Steamship Company; the Pennsylvania and the Chicago and Eastern Illinois declared extra dividends, and the dividend of the Lehigh Coal and Navigation Company was again increased. The purchase in December of the Pennsylvania Coal Company in the interest of the Erie Railroad was one of the most important events, practically insuring the maintenance of harmonious relations between the anthracite coal railroads and the principal individual operators. This movement gave color to rumors of far-reaching railroad combinations, which were partly confirmed on Jan. 5 by the announcement that the Central New Jersey had been bought by J. P. Morgan & Co., who had turned the property over to the Reading, which they already controlled. A report was then current that control of the St. Paul had been bought by Great Northern and Northern Pacific interests, who would lease the road, and that purchase of the Wabash was contemplated for the purpose of making a seaboard connection through the Erie.

Listings of railroad bonds on the New York Stock Exchange during the year amounted to \$443,713,000, of which \$147,678,597 were new issues. The stocks listed aggregated \$620,935,000,

of which \$296,550,572 represented new issues. Compared with those in 1899, bond listings were \$81,671,240 and those of stocks were \$83,220,000 less this year, mainly because of fewer reorganizations and extensions. The industrial properties placed upon the "unlisted" department were in number, having a total of \$132,901,100 common and \$31,325,000 preferred stock.

Manufacturing Industries.—It is noteworthy that while in 1899 there was apparently a widespread tendency in the direction of consolidation of capital in manufacturing enterprises, there was in 1900 a marked change in the character of the movement. Previously old or more or less established concerns were absorbed by the combination, whereas in this year new competitive companies were formed. The change was doubtless largely due to the fact that in the previous year capital creations were so enormous that they were not only unwieldy, but they caused apprehensions among the banking interests of the country that they were likely to become a disturbing factor. Moreover, owing to the extremely conservative treatment of these proposals by the bankers the digestion of the securities issued by the corporations was impeded, the market for them grew congested, and much difficulty was experienced in obtaining subscriptions for even the most promising of new enterprises. At the close of 1899 consolidation schemes were pending involving an aggregate capitalization of more than \$600,000,000, while the capital of companies projected and later abandoned exceeded \$1,000,000,000. At the close of 1900 comparatively few of the above noted pending schemes had been completed, and a very small number of the abandoned plans had been revived. The new industrial organizations which were perfected this year represented \$948,875,000 in stocks and bonds as against \$5,215,795,000 in 1899, which latter sum included concerns projected and abandoned and included capital proposed which were never completed. Careful revision of the emissions of stocks and bonds of companies projected in 1899 and the then completed organizations represented a capitalization of \$2,543,350.

In January a remarkably favorable statement, somewhat indicative of prosperous industrial conditions, accompanied the declaration of dividends on the common stock of the American Steel and Wire Company. A war between the Consolidated Gas Company and the New Amsterdam Company was vigorously conducted, resulting in a sharp rise in the price of gas in New York city from \$1.05 to 65 cents per thousand. In February English cotton spinners who had refrained from buying the staple in the previous year because of misleading estimates of the yield of the American crop, became alarmed concerning the tactical position of the crop and bought freely, thus influencing a sharp rise in the price of the cotton and consequently in the manufactured goods. In March, American Malting Company was unfavorably affected by the admission by the directors that the dividends predicated upon the results of 1898 had been based upon expected profits which were not realized. This announcement had a specially depressing influence upon other industrial properties, which depression was intensified in the following month by disclosures regarding the unfavorable condition, owing to overproduction, of the American Steel and Wire Company and other enterprises of a similar character, which had an unsettling effect upon the iron and steel industry. In May this industry and the metal trade generally became more or less demoralized not only in this country but in England and Ger-

d in nearly all lines of trade accumulating stocks of goods and falling values were the feature. Print cloths were reduced from $3\frac{1}{2}$ to $3\frac{1}{4}$ cents in May and to $2\frac{1}{2}$ cents in June, though the price of cotton was rising, and in the last month steel billets fell to \$25 per ton against \$32 in May, and even at the decline consumers refrained from buying. In July the price dropped to \$19 per ton in Pittsburgh, and in that month the cotton manufacturing industry began to feel the effect of the check to exports caused by the troubles in China. The industrial depression was more or less marked during the presidential campaign. In September the print cloth market was partially relieved by the purchase of 100,000 pieces of accumulated stocks at $2\frac{1}{4}$ cents. The Amalgamated Association of Iron and Steel Workers and the manufacturers settled their differences, giving work to 60,000 men who had been unemployed since July, and the American Tin Plate Company likewise adjusted the troubles with their employees. A strike of anthracite coal operators, involving 140,000 men, began in September and ended in the following month, the operators acceding to the demands of the miners. After the presidential election industrial affairs rapidly improved, iron production increased, prices of manufactured articles generally rose, and prosperous conditions prevailed for the remainder of the year. In the woolen and silk manufacturing industries there were, however, notable exceptions. The woolen manufacturers early in the year suffered from overproduction and also from the cancellation of orders, and the trade was in a state of depression for the greater part of the remainder of the year, without clear indication of improvement at the close. Silk manufacturers encountered a rising market for the raw material early in the year, and they bought freely at about the highest prices. When the new crop began to arrive prices rapidly declined, entailing loss upon manufacturers. They showed forced sales of goods, unmistakably indicating overproduction. Toward the close of the year, however, the industry showed improvement, turning chiefly to curtailment of output. There was a steady gain in exports of manufactured goods during the first quarter of the year, for March amounting to \$44,767,139, against \$586,940 in January. Then followed a gradual decline in the value of these exports to \$32,281,487 in November. The total for the year was, however, unprecedentedly large, amounting to \$432,366, against \$380,787,891 in 1899 and \$307,394 in 1898. The falling off in the exports for the middle of the year was largely due to an interruption to Chinese trade in cotton goods, and also to the waning movement in bicycle exports.

The commercial failures for the year were 10,774 in number, involving \$138,495,673 of liabilities. Besides the strictly commercial defaults, however, there were 60 financial concerns, involving \$34,000. The above-noted failures compare with 17 in 1899, involving \$90,879,899; 12,186 in 1898, with liabilities of \$130,662,899; 13,351 in 1897, involving \$154,332,071; and 15,088 in 1896, involving \$226,096,134.

FINE ARTS IN 1900. Under this title are listed the principal art events of the year ending in December, 1900, including especially the great exhibitions in Europe and the United States, sales, acquisitions of works of art, and erection of public statues and monuments.

Paris.—In consequence of the transformation of the Galerie des Machines, where the exhibitions of the two salons were held in 1898 and 1899, into the *Salles des Fêtes* for the Universal Exposition of

1900, the annual exhibition of the Société des Artistes Français was held in the Place de Breteuil. The Société Nationale des Beaux Arts held no exhibition in 1900.

Paris: Salon of the Artistes Français.—The Société des Artistes Français elected the following officers for the year: Honorary Presidents, Léon Bonnat, Édouard Detaille; President, Jean Paul Laurens; Vice-Presidents, Auguste Bartholdi, Tony Robert-Fleury; Secretaries, Georges Jehan Vibert, Georges Lemaire, Jean Louis Pascal, Augustin Mongin; Corresponding Secretary, Albert Maignan; Treasurer, Émile André Boisseau.

The annual exhibition, opened on April 7, comprised 2,872 numbers, classified as follows: Paintings, 1,379; cartoons, water colors, pastels, miniatures, enamels, porcelain pictures, etc., 426; sculptures, 380; engraving on medals and precious stones, 59; architecture, 99; engraving and lithography, 376; decorative art, 153.

The following are the honorary awards for 1900: Section of Painting: Medal of honor, Ferdinand Humbert, *Portraits de Alex et Elsa Eyraud*. No first-class medal awarded. Second-class medals: Charles Moulin, *Achille Granchi-Taylor*, Henry Pinta, *Louis Ridet*, Camille Delpy, *Victor Leydet*, Adolphe Lalire, *Paul Charles Chocarne-Moreau*, Émile Troucy, *J. Louis Verdier*, Frédéric Lauth, *Mme. Hortense Richard*. Third-class medals: Henri Emilien Rousseau, *Laurent Jacquot-Defrance*, Charles Sims, *Jacques Roger Simon*, Joseph Marius Avy, *Mlle. Lenique*, Édouard Zier, *Ludovic Alleaume*, Jacques Marie, *Paul Legrand*, Adolphe Déchenaud, *Mme. Frédérique Vallet-Bisson*, Frank Russell Green, *Nicolas Auguste Laurens*, Henry Tenré, *Dwight Frederick Boyden*, *Mme. Wisinger-Florian*, *Mlle. Charlotte Chauchet*, *Joseph Bail*, *Richard E. Miller*, *Gustave Pierre*, *Auguste Levêque*, *George Inness*, *René Charles Edmond His*, *Lucien Stoltz*, *Adrien Gabriel Voizard-Margerie*, *Etienne William Cot*, *Paul Antin*, *Emmanuel Fougerat*.

Section of Sculpture: Medal of honor, Raoul Verlet, *fountain for city of Bordeaux*. First-class medals: Henri Coutheillas, *Henri Vidal*. Second-class medals: Auguste Carli, *Gaston Leroux*, Marie Pierre Curillon, *Jean Baptiste Antoine Champeil*, *J. Henry Schmid*, *Athanase Théodore Fossé*. Third-class medals: Henri Frédéric Varenne, *Paul Richer*, *André Abbal*, *Jules Déchin*, *Charles Joseph Michel Mathieu*, *Eugène Léon L'Hoest*, *Louis Bertrand*, *Victorien Tournier*, *Pierre Robert Christophe*, *Auguste Maurice Verdier*.

Section of Architecture: Medal of honor, Albert Guilbert, *commemorative monument*. First-class medals: Désiré Despradelle, *Alfred Henri Recoura*. Second-class medals: Paul Bigot, *Auguste Patouillard*, *Marcel Dourgnon*. Third-class medals: Félix Capron and *Gaston Renevey*, *Gustave Dehaudt*, *Louis Léonard Martin*, *Henri Victor Blanchard*, *Emil Pierre Demur*, *Georges Gromort*.

Section of Engraving and Lithography: Medal of honor, Auguste Boulard, *Vive l'Empereur* (etching). First-class medal, Abel Mignon. Second-class medals: Eugène Chiquet, *Paul Avril*, *Firmin Bouisset*, *Edmond Duplessis*. Third-class medals: Antonin Delzers, *Charles Dupont*, *Edgar Chahine*, *Gaston Rodriguez*, *Frédéric Jacque*, *Gustave Frantzen*, *Auguste Leroy*, *Jules Lerendu*, *Léon Hodebert*, *Mme. Goldammer-Dupont*.

In consequence of the Exposition Universelle, to which the best works of the French painters were contributed, the exhibition of the Société des Artistes Français comprised but little more than half the usual number of pictures, sculptures, and other exhibits. Want of space will prevent any detailed description this year.

Paris: Exposition Universelle.—The art exhibition constituted one of the principal features of the exposition of 1900, a special new building, called the Grand Palais des Beaux Arts, with large and spacious galleries, having been erected for it on the Avenue Nicolas II. This splendid building, which is not doomed to destruction like most of the other exposition structures, but is destined to be permanent and the future home of the Salons, consists of two long lateral wings connected by two lines of galleries, the whole forming a structure nearly resembling in plan the letter H. It may be divided, as to its exhibits, into three distinct collections: First, a French centennial exhibition, comprising French paintings, sculptures, drawings, and prints from the beginning of the century down to the last international exposition, an effort having been made not to repeat the exhibits of 1889; second, a French decennial exhibition, composed of the works of French artists during the past ten years since 1889; and third, a foreign decennial exhibition, including the productions of foreign artists during the same period. Twenty-three of its galleries were devoted to French art, while not more than six galleries were allotted to any one foreign country.

The awards consisted of medals of honor, first-class medals (gold), second-class medals (silver), third-class medals (bronze), and honorable mention. They were so numerous, especially in the lower classes, that we can give only the first two classes in painting in full and the American second-class medals.

Medals of honor:

Austria—M. Klint.

Belgium—Alfred Stevens, Alexandre Struys.

Denmark—Peter Severin Kroyer.

England—Laurence Alma-Tadema, W. Quiller Orchardson.

France—Jean Jacques Henner, Jean Charles Cazin, Dagnan-Bouveret, Henri Harpignies, Ernest Hebert, Alfred Philippe Roll, Antoine Vollon, Benjamin-Constant, Aimé Morot, Henri Martin.

Germany—Francis Lenbach, Fritz von Uhde.

Holland—Josef Israels.

Italy—Jean Boldini.

Norway—Fritz Thaulow.

Russia—M. Serof.

Spain—Joaquin Sorolla y Bastida.

Sweden—Anders Zorn.

United States—James McNeill Whistler, John S. Sargent.

Of the above artists MM. Hébert and Dagnan-Bouveret received the medal of honor the second time, both having been similarly honored at the exposition of 1889.

First-class medals were awarded as follow:

Austria—Heinrich de Angeli, Josef Mehoffer.

Belgium—Alfred Baertsoen, Émile Clous, Leon Frédéric, Th. Verstraete.

Bulgaria—M. Mrkvicka.

Denmark—Vigo Johansen, Th. Philipsen.

France—Armand Bertin, Alfred Pierre Agache, Joseph Bail, Mlle. Caroline Bailly, Léon Barillot, Marcel Baschet, Victor Binet, Jacques Blanche, Eugène Buland, Georges Callot, Paul Chabas, Jules Chéret, Charles Cottet, Adrien Demont, Mme. Demont-Breton, Louis Deschamps, Émile Friant, Gustave Gagliardini, J. Geoffroy, Albert Laurens, Ernest Laurent, Henry Lerolle, Henry Lévy, Maurice Lobre, Edgard Maxence, René Ménard, Boutet de Monvel, J. A. Meunier, Petitjean, Pointelin, Xavier Prinnet, P. Renouard, A. de Richmond, Henri Royer, Georges Rochegrosse, J. Saint-Germier, P. Santai, Lucien Simon, Francis Tattetgrain, Paul Vayson, J. H. Zuber.

Germany—E. von Gebhardt, Michel Hertrich,

Max Koner, Gotthard Kuehl, Andre Muller, Franz Stuck.

Great Britain—Stanhope Forbes, John Swan, E. J. Gregory, George Clausen, George Reid, J. H. Lorimer.

Greece—G. Jacobides.

Holland—B. J. Blommers, G. H. Breitmer, H. W. Mesdag, H. J. Weissenbruch.

Hungary—Jules Benczur, Stephen Csok, Philip Lazlo.

Italy—L. Balestrieri, Pie Joris, F. P. Michetti, Ange Morbelli, Dominique Morelli, Hector Tito.

Japan—M. O-Hashi.

Norway—Eyolf Soot, Halfdan, Strøem, Eiebakke.

Portugal—B. P. Columbano, J. Salgado.

Russia—Philip Maliavine, Constantin Korovinc, Axel Gallen, Ero Jaernefelt.

Spain—Jimenez Aranda, Ulpiano Checa, Vierge.

Sweden—Carl Larsson, Nils Forsberg, Alfred Wahlberg.

Switzerland—Ferdinand Hodler, Carlos Schwabe, E. Burnaud, Mlle. Louise Breslau.

United States—J. W. Alexander, Mlle. Cecilia Beaux, George Brush, William M. Chase, Winslow Homer, Abbott H. Thayer.

Second-class medals awarded to American artists: Barlow, Benson, Bisbing, Bohm, Bridgman, Clark, Fromuth, Gay, Gibson, Hassam, Johnson, Keller, Lockwood, MacEwen, Nourse, Reid, Story, Tanner, Vinton, Walden.

In the Section of Engraving and Lithography, Americans honored were: Whistler, medal of honor; Cole and Pennell, first-class medals. Second-class medals were awarded to Schladitz and Wolf.

In the Section of Sculpture, medals of honor were given to French, MacMonnies, and Saint-Gaudens, and first-class medals to the following: Barnard, Brooks, Grafly. Second-class medals: Bitter, Borglum, Dallin, Flanagan, MacNeill.

In the Section of Architecture no medal of honor was given to an American. First-class medals: Boring, McKim. Second-class medals: Cope, Day, Flagg, Benson and Brockway, Hunt, Peabody and Stearns, Post, Shepley, Warren.

Paris: Miscellaneous.—An important art event of the year was the sale at the Georges Petit gallery, May 20 to June 7, of the paintings, drawings, and studio effects of Rosa Bonheur. The pictures, chiefly those which the artist chose to keep beside her and not to sell, numbered 892, and included paintings of wild beasts, horses, mules, asses, cattle, sheep, dogs, foxes, etc., and a large number of landscapes. Besides these there were nearly 1,000 water-color and pastel studies. The total amount realized at the sale was 1,180,880 francs, of which 935,121 francs was for paintings. Among the best prices obtained were: Lion Couché, 15,100; Tigre Royal dans le Jungle, 9,150; Tigre Royal, 5,300; Le Roi de Désert, 7,000; Tête de Lion, 8,000; Lion Regardant le Soleil, 5,900; Les Lionceaux, 9,900; Tête de Lion, 11,300; Cheval Blanc au Vert, 8,200; Bœufs Nivernais, 33,600; Bœufs dans un Pâturage, 17,500; Bœufs Écossais, 10,800; Cerf Écoulant le Vent, 21,300; Dans la Forêt, le Matin, 20,200; Le Marché aux Chevaux de Paris, 9,300. The highest price paid for a drawing was 7,700 francs for a small water color of a tiger. A large number of the drawings, which were of the greatest interest, sold for more than 1,000 francs each.

The sale of the Moreau-Nelaton collection, May 11 to 15, brought a total of 600,718 francs. Among the best prices obtained were: Decamps—Enfants effrayés à la Vue d'une Chienne, 101,000 francs; A la Porte du Chenil, 35,000; Le Capucin Collecteur, 8,000; Paysan à l'Affût, 7,000. Diaz—Le Conte Arabe, 10,800. Jules Dupré—Le Chemin

vant l'Auberge, 5,700. Ziem—Le Grand Canal Venise, 49,500; La Flotte dans le Grand Canal, 700.

An equestrian statue of Washington, the gift of the women of America to the women of France, was unveiled in Paris on the 3d of July. It is the work of Daniel C. French and E. C. Potter, and is the first bronze statue cast in the United States and sent to Europe. The total height, with the pedestal of Tennessee marble, is 22 feet.

A statue of Rosa Bonheur, representing her in the costume she was accustomed to wear when at work, has been erected in one of the principal squares of Fontainebleau. She is clad in a peasant's blouse which partially covers velvet trousers, the dress well known to the farm hands of By, a little place a few miles from the forest of Fontainebleau. The head, covered with a mass of bushy hair, as she used to wear it, is a fine one.

London: Royal Academy.—The thirty-first annual winter exhibition was devoted to the works of Van Dyck, and, though coming so soon after the tercentenary exhibition at Antwerp last year, possessed some features which made it of especial interest. While it contained more of the best English examples of the master than were shown at Antwerp, it exhibited also some of the best foreign examples which made that display memorable. Among these latter was the famous portrait of Philip, Lord Wharton, belonging to the Emperor of Russia, sold in 1779 with the Walpole collection. Other notable exhibits were the Madonna and Child with the Abbé Scaglia as Donor, lent by the Duke of Rothschild; The Betrayal of Christ, by Francis Cook; Marchese di Spinola, by the Earl of Hopetoun; portrait of Paola Adorno, by the Duke of Abercorn; and portraits of Thomas Milgrew and Thomas Carew, portrait of Beatrice Cusance (Princesse de Cante-Croix), and Three Children of Charles I, from the collection at Windsor Castle.

The one hundred and thirty-second summer exhibition, with more than 2,000 numbers, equaled in artistic importance most of those of past years withstanding the absence of some of the great names removed by death in the past decade. Among the recognized best pictures of the year Mr. Sargent's life-size portrait of the three sisters George Wyndham, M. P.—Lady Elcho, Mrs. Tennant, and Mrs. Adeane—whose some of the critics account one of the noteworthy products of the last quarter of the century. Besides this masterpiece, Mr. Sargent contributed portraits of Lord Russell of Killowen and of Lord Dalhousie, both of which attracted attention.

Briton Riviere contributed a notable St. George, representing the hero stretched at full length on the ground, exhausted by his encounter with the dragon, with his head upheld by the succored princess Sabra. The dragon, which forms the central motive of the picture, stretches his immense body in a sinuous line from the foreground, where it incloses St. George's horse, to the edge of a cliff, where its head lies. Beyond the cliff are the deep blue waters of the sea, their color reflected in the blue scales of the dragon, which are emphasized by the chestnut of the crushed horse.

Sir Alma-Tadema's exhibit, entitled Gold Fish, presents a pillared and tessellated court with a gold-fish pool in the center. Beside this, lying at full length, with a cushion under her arms, is a red-haired girl in a pale green robe, and in the distance an almost imperceptible figure crossing a bridge is watched by a girl on the terrace without. Sir Edward Poynter, the president of the Academy, was represented by a life-size portrait of Mrs. Murray Guthrie, in an evening dress of white

satin, seated in an empire chair. He sent also a classical study in oils—two Greek girls at a fountain—and a water-color drawing of a scene beside the Lake of Orta.

E. Blair Leighton's picture, entitled God Speed, represents a lady standing on a stairway beside a castle gate, binding a scarf on the arm of her knight about to go forth, one may suppose, to combat for her sake. Through the gateway, under the raised portcullis, are seen the spears of his troop riding out of the castle.

Edwin Abbey was represented by two Shakespearean themes, one, entitled The Trial of Queen Katherine, depicting a poignant moment in the history of Katherine of Aragon, the other The Penance of the Duchess of Gloucester. The latter, wrapped in only a white sheet and barefooted, is walking over rough stones carrying a lighted taper, followed by her conductor to the Isle of Man, Sir John Stanley.

A. S. Cope contributed a full-length portrait of Lord Kitchener of Khartoum, in khaki, standing in his tent, and Prof. Herkomer sent a three-length life-size portrait, in uniform, of the Duke of Connaught.

Mr. Orchardson's picture, the largest in the exhibition, being some 14 feet long, a commission from the Royal Agricultural Society, commemorates the Prince of Wales's presidency of the society. It represents the corridor at Windsor Castle, with the Queen, the prince, and other members of the royal family carefully and successfully grouped.

Among many landscapes and sea views, noteworthy are Colin Hunter's London from the Tower Bridge, David Murray's In View of Windsor, Edward Stott's Saturday Night, J. McWhirter's Over the Sea from Skye, and C. E. Johnson's Autumn on the Wye.

English artists are disappointed at the decrease of the amount of sales of pictures at the Royal Academy, the total being £16,084, as against £21,670 received in 1899. The falling off is generally attributed to the war in Africa. Frank Dicksee's Two Crowns was purchased by the Chantry fund trustees for £2,000. Miss Kemp-Welch's Horses Bathing brought £1,000. The highest price paid for a water color was £150 for a work by Alfred East.

London: New Gallery.—The winter exhibition was devoted to examples of early Flemish and Netherland art. Most of the famous masters of these schools were represented either by well-known originals or by attributed pictures. Among the interesting examples was The Holy Women at the Sepulchre, attributed to Jan van Eyck, from the collection of Sir Francis Cook. Of many pictures attributed to Hans Memling, the Virgin and Child with Saints, owned by Mr. Bodley, was most admired. The north room was devoted almost entirely to Rubens, among the exhibits being his large Daniel in the Lion's Den and Diana and her Nymphs.

The fourteenth summer exhibition contained 498 numbers of about the average merit. Among the best pictures was Edward Stott's Little Apple Gatherer, a blue-eyed peasant girl standing full-faced, plucking with her left hand fruit from a limb above to put into her pinafore gathered up with her other hand. The same artist sent also two other pictures—The Widow's Acre and Sundown.

Mr. Watts contributed portraits, as did also Sir George Reid and Mr. Sargent. Mr. Sargent's picture, the Hon. Victoria Stanley, represents a little girl of six years, standing with a whip in her hand.

London: Miscellaneous.—The sale of the collection of Sir Robert Peel, on May 10 and 11, including both paintings and sculptures, produced a total of £62,500. Of the former, two Van Dycks, portraits of a Genoese senator, said to be Bartolommeo Giustiannini, and his wife, brought £24,250. This is the record price, says the London Art Journal, for a Van Dyck in the auction room, though the equestrian portrait of Charles I, now in the National Gallery, was bought in 1884 by the Government from the Duke of Marlborough for £17,500. Other sales were: Portrait of Marie Antoinette, doubtfully attributed to Greuze, 1,350 guineas. Sir Peter Lely, portrait of Cowley (the author), 670 guineas; Nell Gwynne, 650 guineas; Countess of Kildare, 650 guineas. Thomas Phillips, portrait of Byron, 300 guineas. Sir Thomas Lawrence, portrait of Curran, 850 guineas. John Hoppner, portrait of himself, 1,500 guineas. Gainsborough, portrait of Sir William Blackstone, 750 guineas. Reynolds, portrait of Dr. Johnson, 420 guineas. William Collins, Winter Scene on the Thames, 2,000 guineas; Morning after a Storm, 1,500 guineas. Landseer, The Shepherd's Prayer, 750 guineas. Mulready, The Cannon, 1,240 guineas. Charles Lucy, Lord Nelson on the Victory, 400 guineas. B. R. Haydon, Napoleon at St. Helena, 400 guineas. Of the sculptures, Sir Francis Chantrey's splendid bust of Sir Walter Scott sold for £2,250. Thorwaldsen's Apollo as a Shepherd brought 600 guineas.

At the James Reiss sale, May 12, a good example of Hobbema, View of a Water Mill, brought 6,200 guineas, and a Rembrandt, Bridge over a Canal, 2,200 guineas.

Among other sales of the year were: Romney, portrait of Charlotte Peirse, 7,000 guineas; portrait of Sophia Lawrence, 2,900 guineas. Gainsborough, Woody Lane with Peasant and Donkeys, 1,170 guineas. Sir John Everett Millais, Boyhood of Raleigh, 5,200 guineas; The Moon is up and yet it is not Night, 1,000 guineas. Lord Leighton, Helios and Rhodos, 2,750 guineas. Meissonier, The Standard Bearer, 2,500 guineas. Troyon, Landscape with Cattle, 2,550 guineas; The Plough, 1,900 guineas. J. F. Millet, The Sower, 850 guineas.

The sale of the collection of the late Mme. de Falbe, on May 19, produced a total of £13,484. Among the pictures were: Gainsborough, portrait of Mrs. Hartley, 300 guineas; Opie, Fortune Teller, 1,200 guineas; Boucher, Marie Leczinska introduced to the Domestic Virtues (dated 1740), 970 guineas; Rubens, Repose of Holy Family, 500 guineas; Velasquez, portrait of Henry de Halmale, 405 guineas; Hobbema, Village Scene, 400 guineas.

The chief art event of the season was the opening of the magnificent Wallace collection, bequeathed by Lady Wallace to the Government, on June 25, at Hertford House, Manchester Square. The scope of the collection, made by the third and fourth Marquises of Hertford and by Sir Richard Wallace, is immense. It contains more than 20 Greuzes and 9 Watteaus, while almost all the great painters of all the schools are well represented. Of the Spanish school there are 6 examples by Velasquez and 8 by Murillo. The Italian school is represented by Titian's Rape of Europa (replica, the original being in Mrs. Gardiner's collection in Boston) and Perseus and Andromeda (from the Orleans gallery), and important examples by Luini, Andrea del Sarto, Domenichino, Canaletto, and Guardi. The collection has 11 Rubenses, including the famous Rainbow Landscape, and 7 Van Dycks. Rembrandt is represented by 11 canvases and Franz Hals by only 1, but an exceptionally fine one, The Laughing Cav-

alier. The examples of the other great Dutch painters are all superior. The English school and the modern French school are also superbly represented. It has been calculated that the entire collection, including arms, bric-a-brac, etc., is worth \$18,000,000. The admission is free excepting on Saturday afternoons, when a fee of sixpence is charged.

New York: National Academy of Design. The officers for 1900 are as follows: President, Frederick Dielman; Vice-President, J. G. Brown; Corresponding Secretary, H. W. Watrous; Recording Secretary, George H. Smillie; Treasurer, Lockwood de Forest; Council, H. Brown, Jones, J. Carroll Beckwith, C. D. Weldon, B. V. Clinedinst, C. Y. Turner, H. Siddons Mowbray. The Academy consists of 98 academicians and 100 associates.

The seventy-fifth annual exhibition was held from Jan. 1 to Jan. 27, in the galleries of the Fine Arts Society building in Fifty-seventh Street, pending the removal of the Academy to its new home at Morningside Heights. It comprised 313 numbers of which 298 were paintings. The prizes of the year were awarded as follows: The Thomas Clarke prize of \$300, for the best American composition painted in the United States by an American citizen, to Charles Schreyvogel, of New York, N. J., for his spirited painting entitled Bunkie, representing an American cavalryman full gallop carrying a wounded comrade over a range in an Indian fight. The Norman W. Dodge prize of \$300, for the best picture painted in the United States by a woman, to Phoebe A. Burr, for her October at Cedar Brook. The Julius and Ethel Rosen prize of \$300, \$200, and \$100, for the three pictures in oil colors painted in the United States by American citizens under thirty-five years of age: First prize to Louis Paul Dessar, for Landscape with Sheep; second to E. Irving Cady, for his Adoration of the Shepherds; third to Granville-Smith, for his Light of the House.

Among the exhibits besides those to which prizes were awarded were: Daniel Huntington, portraits of Carl Schurz, Morris K. Jesup, and J. W. McLane; John F. Weir, East Rock—Haven, November Landscape, and Holyhood; George H. Smillie, At Cotuit—Cape Cod, Rose the Lighthouse—Northeast Coast; Eastman Johnson, portraits of Whitelaw Reid, Gen. Thomas Davies, and Edward Lyman; Gilbert Gaul, Child Hassam, The Flower Shop; George Inness, Jr., Sheep in Pasture; Irving R. Wiles, A Summer Island Road, A Summer Interior; Clara T. Chesney, portrait of Moncure D. Conway; Charles Warren Eaton, September Moonrise, Valley Sunset; Thomas Moran, The Teton Range—Indian The Cliff Dwellers—Arizona, The Pearl of Venice; J. Wells Champney, Fair Nineteen; F. A. B. man, In the Oasis; Henry Mosler, Day Dream; Arthur Parton, An Old Orchard, Arkville Mountains; E. L. Henry, Home from the Philippines.

A new annual prize for each Academy exhibition has been founded by George Inness, Jr., in memory of his father, to be called the George Inness Medal. It consists of a gold medal of the value of \$100 and is to be awarded to the best painting with regard to subject.

New York: Society of American Artists. The twenty-second annual exhibition was held at the Fine Arts Society building, from March 1 to April 28. The officers for 1900 are: President, John La Farge; Vice-President, Kenyon Cox; Secretary, Douglas Volk; Treasurer, Samuel L. H. These, together with Edwin H. Blashfield, constitute the Board of Control. Advisory Board, Herbert Adams, William Bailey Faxon, Ke-

Frazier, Will H. Low. The society has 113 members.

The Shaw fund of \$1,500, awarded annually for the purchase of a figure composition in oil by an American artist, was given to Irving R. Wiles for his picture entitled *The Yellow Rose*. The Webb prize of \$300, for the best landscape in the exhibition painted by an American artist under forty years of age, was awarded to W. Elmer Schofield for his picture entitled *Autumn in Brittany*.

The exhibition comprised 378 numbers. Among the principal exhibits were: Cecilia Beaux, portrait of Rev. William R. Huntington; William M. Chase, *Rest by the Wayside*, *A Gray Day*, and *Spring*; John La Farge *The Divinity of Contemplation* seated by the Stream of Life (Japanese subject); Eastman Johnson, *Child and Rabbit*, *Boy with Violin*; Carleton Wiggins, *Late Afternoon—Long Island*; R. Swain Gifford, *Port Clarence—Bering Strait*; Kenyon Cox, *A Fan*, *Hope and Memory*; Leonard Ochtman, *The Lane at Twilight*; Thomas Moran, *The Goose Pond*; Arthur Parton, *Close of Day*; Edward Gay, *The Wheat Field*; Charles Warren Eaton, *Evening in Maine*; Anna Lea Merritt, *Merry Maids*; Charles Hopkinson, *In the Harvard Yard*.

New York: Miscellaneous.—The principal art sale of the year was that of the William T. Evans collection, exhibited at the American Art Galleries and sold on three nights in February at Chickering Hall. The total sum realized for 270 lots was \$158,340. On the first night the highest price obtained was for Homer Martin's *Westchester Hills*, which brought \$4,750. Other prices were: R. C. Minor, *The Close of Day*, \$3,050. George Inness, *Sunset on the Passaic*, \$2,500; Montclair by Moonlight, \$1,000; Meadowland in June, \$850. Benjamin Fitz, *The Reflection*, \$2,450. F. S. Church, *Pandora*, \$1,000; *Una and the Lion*, \$720. Abbott H. Thayer, *Young Woman*, \$2,050. Henry W. Ranger, *Connecticut Woods*, \$1,400; *Morning at High Bridge*, \$1,400; *New Jersey Oaks*, \$1,100. H. Siddons Mowbray, *Arcadia*, \$960.

On the second night the best sales were: George Inness, *Georgia Pines—Afternoon*, \$5,900; *Nine o'Clock*, \$3,550; *The Valley on a Gloomy Day*, \$1,225. Winslow Homer, *Weather Beaten*, \$4,000. Henry W. Ranger, *A Veteran*, \$1,100; J. G. Brown, *The Longshoreman's Noon*, \$1,350. F. S. Church, *St. Cecilia*, \$1,200; *The End of Winter*, \$1,025. A. H. Wyant, *Driving Mists*, \$2,550; *Cloudy Day—Keene Valley*, \$2,100. George Fuller, *Bringing Home the Cow*, \$1,550. Homer D. Martin, *Normandy Trees*, \$2,850.

The best sales on the third night were: A. H. Wyant, *In the Adirondacks*, \$6,300. George Fuller, *Lorette*, \$3,600. Homer Martin, *Old Church in Normandy*, \$3,200; *A Normandy Farm*, \$1,600. George Inness, *Winter Morning* at Montclair, \$2,500; *A Summer Morning*, \$1,200; *The Moon at Night*, \$1,050. Wyatt Eaton, *Reverie*, \$1,200. F. Murphy, *An Autumn Landscape*, \$1,025. W. H. Low, *The Harvest Procession*, \$1,400. W. Medley Bunce, *Sunset, San Giorgio, Venice*, \$1,000. H. W. Ranger, *A Connecticut Pasture*, \$1,400; *An East River Idyll*, \$1,350. F. S. Church, *Madonna of the Sea*, \$1,125; Carleton Wiggins, *After Wind, Rain*, \$900.

The sale of the collection of the late Judge Hilton, at Chickering Hall in February, brought \$118,715 for 169 pictures. Meissonier's *L'Aumône* brought the highest price, \$18,300. It is said to have cost A. T. Stewart \$24,000.

The Austin H. King collection of modern foreign paintings, sold in February, realized a total of \$77,375 for 57 works. The highest price was \$7,000 for a fine Schreyer, *Bedouins on the March*. Other

sales were: Alma-Tadema, *Tibullus in Delos*, \$5,850; Grison, *After the Fête*, \$3,550; Diaz, *In the Forest*, \$3,825; Van Marcke, *In the Lane*, \$3,550.

Florence.—A new Botticelli has been added to the little room in the Pitti Palace where for the past four years has hung the Pallas of the Medici, found in a similar way, and, like the latest acquisition, attributed to the early years of the master. The new picture, resurrected from the rubbish of the attic, is a Madonna and Child with Angels, a circular painting on wood. It contains six figures—the Virgin, with long, emaciated hands clasped, kneeling in front of the Child, who, held by two angels at the left, is raising his arms toward her, and behind, at the right, two more childlike angels. Behind, full-blown roses twine themselves into a decorative background. Though the Italian experts pronounce the authenticity of the picture undoubted, some critics of the first rank are inclined to question their judgment.

Haarlem.—In August Haarlem in the Netherlands was the scene of interest to all art lovers in the erection of a fine statue to its great portrait painter, Franz Hals, who died there in 1666. The city was *en fête*, a charming little drama illustrating the painter's life was enacted by a private club, and *tableaux vivants* of his works were given by resident artists and others interested in art. The drama depicted his career from his days of poverty to the culmination of his art life, when the burgomeester came to inform him that the town had voted him a pension with free house rent for the rest of his days.

Philadelphia: Pennsylvania Academy of Fine Arts.—The sixty-ninth annual exhibition, opened in January, was more than usually successful, and attracted contributions from all parts of the country. The prizes were awarded as follow: Temple gold medal for the best painting in oil by an American artist, to Miss Cecilia Beaux, for her portrait group entitled *Mother and Daughter*. The Walter Lippincott prize of \$300, for the best figure painting by an American artist, to Henry O. Tanner, for his picture entitled *Nicodemus*. The Mary Smith prize of \$100, for the best painting by a resident woman artist, to Mary E. R. Clay, for her portrait entitled *Irene K.* Honorable mention to Janet Wheeler, for her *Portrait*, owned by Miss Howell.

Pittsburg: Carnegie Institute.—The fifth annual celebration of Founder's Day was held in Carnegie Music Hall on Thursday, Nov. 1. The principal speaker was his Excellency Wu-Ting-Fang, Chinese minister to the United States, who made a comparison between Oriental and Occidental methods of education.

The awards of the International Art Jury of the prizes for pictures in the art exhibition were as follow: André Dauchez, Paris, France, medal of the first class (gold), carrying with it an award of \$1,500, for his picture entitled *The Kelp Gatherers*. Ben Foster, New York, medal of the second class (silver), carrying with it an award of \$1,000, for his picture entitled *Misty Moonlight Night*. Sergeant Kendall, New York, medal of the third class (bronze), carrying with it an award of \$500, for his picture entitled *The End of the Day*. Robert W. Allan, London, honorable mention, for his picture entitled *All Hands on Deck*. Julius Olsson, London, honorable mention, for his picture entitled *Waterfall in Winter*. W. Elmer Schofield, Ogontz, Pa., honorable mention, for his picture entitled *Twilight*.

Miscellaneous.—In April was unveiled near Morningside Park, New York, at One Hundred and Thirteenth Street, a monument by Bartholdi

consisting of bronze statues of Washington and Lafayette, on a granite pedestal. It is a reproduction of the monument lately erected in the Place des États-Unis, Paris, by the same sculptor.

Among the contributions to the Metropolitan Museum, New York, during the year are: Cambyse's Punishment of an Unjust Judge, by Rubens, from the J. L. Monke collection, Antwerp, presented by William E. Dodge; and three pictures presented by J. Pierpont Morgan—portrait of Columbus, by Sebastian del Piombo; Lord Nelson on the Victory, by Charles Lucy; and Napoleon at St. Helena, by Benjamin Robert Haydon. The last two pictures were bought at the Sir Robert Peel sale in May at 400 guineas each.

Benjamin West's painting The Raising of Lazarus, which hung for many years in Winchester Cathedral, England, has been presented by its purchaser, J. Pierpont Morgan, to the Wadsworth Athenæum, Hartford, Conn. The canvas, which is signed Benj. West, 1780, measures 10 feet 10 inches by 5 feet 5 inches.

The Botticelli Madonna, sold by Prince Chigi, of Rome, to a London firm of picture dealers, has been purchased by Mr. P. A. B. Widener, of Philadelphia, and is now hung in the art gallery of his country house at Elkins. This famous picture, called the Madonna of the Thorns, represents the Virgin with the infant Jesus in her lap at the right, and at the left a celestial youth offering a gift of wheat and grapes. Over the youth is a crown of thorns, from which the picture derives its name. The sale of this picture being in violation of the law prohibiting the exportation of works of the old masters from Italy, Prince Chigi is reported to have been condemned to pay a fine of \$63,000, the amount paid for the picture by the London firm. The inference is that the picture cost Mr. Widener more than this sum.

FLORIDA, a Southern State, admitted to the Union March 3, 1845; area, 58,680 square miles. The population, according to each decennial census since admission, was 87,445 in 1850; 140,424 in 1860; 187,748 in 1870; 269,493 in 1880; 391,422 in 1890; and 528,542 in 1900. Capital, Tallahassee.

Government.—The following were the State officers during the year: Governor, William D. Bloxham; Secretary of State, John L. Crawford; Treasurer, James B. Whitfield; Comptroller, W. H. Reynolds; Attorney-General, William B. Lamar; Superintendent of Public Instruction, William N. Sheats; Adjutant General, Patrick Houstoun; Commissioner of Agriculture, Lucius B. Wombwell; State Chemist, W. A. Rawls; State Examiner, W. V. Knott; Railroad Commissioners, R. H. M. Davidson, H. E. Day, J. M. Bryan; State Health Officer and Secretary Board of Health, Dr. Joseph Y. Porter; Board of Health, W. B. Henderson, D. T. Gerow, H. L. Simpson; Chief Justice of the Supreme Court, R. F. Taylor; Associate Justices, Milton H. Mabry and Francis B. Carter.

Population.—The official figures of the national census for 1900 are compared in the table below with the figures of the census of 1890, and show the increase in percentages by counties.

The population of the largest ten cities in 1900 was as follows, the figures in parentheses being those for 1890: Jacksonville, 28,429 (17,201); Pensacola, 17,747 (11,750); Key West, 17,114 (13,080); Tampa, 15,839 (5,532); St. Augustine, 4,272 (4,742); Lake City, 4,013 (2,020); Gainesville, 3,633 (2,720); Ocala, 3,380 (2,904); Palatka, 3,331 (3,039); Fernandina, 3,245 (2,803).

Finances.—The report of the Treasurer at the close of business, Nov. 30, 1900, showed a balance to the credit of the several State funds amounting to \$406,041.78. During the past two years \$200,000

COUNTIES.	1900.	1890.	Per cent.
The State	528,542	391,422	35.0
Alachua	32,245	22,934	40.5
Baker	4,516	3,333	35.4
Bradford	10,286	7,516	36.9
Brevard	5,158	3,401	51.6
Calhoun	5,132	1,681	205.2
Citrus	5,391	2,394	125.1
Clay	5,635	5,154	9.3
Columbia	17,094	12,877	32.7
Dade	4,955	861	475.0
De Soto	8,047	4,944	62.7
Duval	39,733	26,800	48.2
Escambia	28,313	20,188	40.3
Franklin	4,690	3,306	47.8
Gadsden	15,294	11,894	28.5
Hamilton	11,881	8,507	39.6
Hernando	3,638	2,476	46.9
Hillsboro	36,013	14,941	141.0
Holmes	7,762	4,356	79.0
Jackson	23,377	17,544	33.2
Jefferson	16,195	15,757	2.7
Lafayette	4,987	3,686	35.2
Lake	7,467	8,034	7.0
Lee	3,071	1,414	117.1
Leon	19,887	17,752	12.0
Levy	8,603	6,586	30.6
Liberty	2,956	1,452	103.5
Madison	15,446	14,816	7.8
Manatee	4,663	2,895	61.0
Marion	24,408	20,796	17.3
Monroe	18,006	18,786	4.1
Nassau	9,654	8,294	16.3
Orange	11,374	12,584	9.6
Osceola	3,444	3,133	9.9
Pasco	6,054	4,249	42.4
Polk	12,472	7,905	57.7
Putnam	11,641	11,186	4.0
St. Johns	9,165	8,712	5.1
Santa Rosa	10,298	7,961	29.3
Sumter	6,187	5,363	15.3
Suwannee	14,554	10,524	38.2
Taylor	8,999	2,122	89.4
Volusia	10,003	8,467	18.1
Wakulla	5,149	3,117	65.1
Walton	9,346	4,816	94.0
Washington	10,154	6,426	58.0

of the public debt has been paid from the general revenue fund by taking up the notes for \$200,000 which were issued by authority of the Legislature of 1889 and 1891. These notes were bearing interest at the rate of 5 per cent., and their payment and cancellation have saved the State \$10,000 in interest, besides reducing the debt \$200,000. This has been done without an increase of taxation. The State tax levy was reduced below the levy authorized by the Legislature a half mill in 1898 and a half mill in 1900. The general revenue fund is now sufficient to meet the general expenses of the State and to pay the expenses of the next Legislature, in 1901. The 2 per-cent. bonds of 1871 remaining in the hands of individuals were to be taken up at maturity, Jan. 1, 1901. The amount thus held was about \$30,000. The remainder of this issue is held in the sinking fund and the educational funds of the State.

The total tax levy in the State in 1899 was 5 mills; for 1900 the levy was fixed at 5 mills, and was distributed as follows: General revenue tax, 2½ mills; pension tax, 1 mill; Board of Health tax, ½ mill; constitutional school tax, 1 mill.

During 1899 the total State taxes levied amounted to \$518,030.12; State licenses, \$144,958.48; county taxes, \$1,126,503.80; school and district taxes, \$43,520.37.

Valuations.—The assessed valuation for 1900 was \$96,518,953.73, an increase of \$2,991,599.94 over the assessed valuation for 1899. (The valuation in two of the counties is estimated, the valuation of 1899 being taken as the basis.) The report of valuations for 1899 gives the following data: Number of horses, asses, and mules, 52,690; neat and stock cattle, 478,707; sheep and goats, 108,668; hogs and dogs, 207,523. Full cash value of all animals, \$4,642,472. Value of all other personal

property, \$10,695,883. Total value of real estate, \$59,177,137; personal property, \$15,338,355; railroads and rolling stock, \$18,759,125.04; telegraph lines, \$252,736.15; aggregate value of all property returned for taxation in 1899, \$93,527,353.79.

Agriculture.—The Commissioner of Agriculture gives the following estimates for 1900: Num-



WILLIAM S. JENNINGS, GOVERNOR OF FLORIDA.

ber of acres under cultivation, 1,058,897. Value in sea island and upland cotton, \$2,319,689; value of field crops, \$5,955,018; value of vegetables, \$648,364; value of citrus fruits, \$794,869; value of melons, \$207,944; value of all fruits but citrus, \$628,352; value of stock and farm cattle, \$6,075,409; value of poultry, \$322,045; value of eggs, \$383,783; value of dairy products, \$811,671; value of honey produced, \$28,883. Total value of agricultural animals and products, \$18,175,227.

Lands.—The Commissioner of Agriculture reports that on Dec. 31, 1900, the State held swamp lands to the extent of 404,667 acres. In 1899 and 1900, 21,714 acres of swamp lands were disposed of. On Dec. 31, 1900, 73,706 acres of internal improvement lands were held, 23,122 acres having been sold in 1899 and 1900. The State school lands, on Dec. 31, approximated 295,646 acres, 46,977 acres having been sold in 1899 and 1900. The State seminary lands on hand Dec. 31 were 28,383 acres; there was sold in 1899 and 1900, 2,034 acres.

The commissioner of the United States Land Office reported on July 1, 1900, that there were 1,596,411 acres of United States land unoccupied in the State.

Banks.—According to the statement of the Comptroller on June 30, 1900, 23 incorporated banks were doing business under the laws of the State. At the close of business, June 30, their assets amounted to \$4,643,618.35, an increase over the assets on Jan. 1, 1900, reported as \$3,862,541.21, of \$781,077.14. Five of the State banks are savings banks or have savings departments. On Jan. 1, 1900, these reported assets of \$1,738,555.71.

Insurance.—The last statement of the State Treasurer gives 87 insurance companies authorized to do business in the State in 1899. Of these, 58 were fire insurance companies, 11 life insurance, 18 miscellaneous (surety, accident, plate glass, marine, etc.). The aggregate risks carried by the companies during 1899 were \$57,203,124, on which the premiums received were \$1,511,645.87. The losses aggregated \$764,202.78. The 58 fire insurance companies wrote risks aggregating \$36,406,652, for which \$710,271.83 in premiums was paid. The losses aggregated \$312,834.39. The 11 life

insurance companies carried risks for \$6,482,133, for which \$739,818.50 was paid in premiums. The total losses sustained were \$432,457.68. The 18 miscellaneous companies wrote risks aggregating \$14,314,339, for which \$61,555.54 was paid in premiums. The losses in this class were \$18,910.71.

Railroads and Telegraphs.—The railroad mileage in Florida in 1900, as assessed by the Comptroller, was 3,109.70 miles of main track, with 341.32 miles of branch, side, and switch track. The assessed valuation of the railroads in the State was \$19,190,301.81. In 1899 the mileage of main track was 3,054.17, with 316.56 miles of branch, side, and switch track. The total assessed valuation in 1899 was \$18,759,125.04. The valuation of rolling stock was \$2,475,228.61.

There were 3,148.40 miles of telegraph lines assessed in 1900, ranging from 1 to 55 wires to each pole. The total assessed valuation for the telegraph lines of the State was \$259,317.40. In 1899 there were assessed 3,002.60 miles of telegraph lines, at a valuation of \$248,734.55.

Corporations.—The following figures are believed to be accurate: Between Dec. 31, 1899, and Dec. 15, 1900, 56 charters of incorporation were issued. These included 11 to manufacturing enterprises, 2 to building and loan associations, 6 to transportation and drainage companies, 4 to mutual profit associations, and 3 to agricultural enterprises. The year was marked by a large increase in naval stores operations, and by the establishment of the first factory to transform cassava and sweet potatoes into starch.

Education.—The following statistics are from the latest report of the Superintendent of Public Instruction for the two years ending June 30, 1898: Children of school age in State (census of 1896), 152,598; white, 86,196; negro, 66,402. Children enrolled in public schools during the school year 1897-'98 numbered 108,455, divided as follows: White males, 35,116; white females, 32,541; negro males, 19,632; negro females, 21,116. The percentage of school population enrolled in public schools was 71 per cent. for both races; whites, 78 per cent.; negroes, 61 per cent. Average length of school term, both races, 104 days; white, 106 days; negroes, 99 days. Illiterates between six and twenty-one years (school census of 1896), 6,752; white, 2,033; negro, 4,719. Per capita expenditure in 1897-'98, both races, \$6.78. Average monthly wages paid: White male teachers, \$38.66; white female teachers, \$33.96; negro male teachers, \$28.85; negro female teachers, \$26.73.

The severe shrinkage in land values of the State, caused by the temporary destruction of the orange industry in the freeze of 1895, decreased the school revenues beyond the point of necessary expenditure. The Legislature of 1899 therefore passed an act permitting counties to divide themselves into subdistricts, which subdistricts might decide by vote whether they would tax themselves (not exceeding 3 mills) in addition to the maximum county tax of 5 mills, authorized by law for schools. Several subdistricts had so taxed themselves when an injunction was served on the school board of Duval County, making a test case as to the constitutionality of the act. The Supreme Court decided in April, 1900, that the act was constitutional.

The State appropriates annually an average of \$35,500 in partial support of normal, military, and industrial schools.

The school census for the school year 1899-1900, as compiled by the State Superintendent of Public Instruction, is as follows: White males, 48,023; white females, 45,328; total white, 93,351. Negro males, 33,689; negro females, 34,388; total negro,

68,077. Total males, 81,712; total females, 79,716. Grand total, 161,428.

Charities.—The School for the Deaf and Blind had an enrollment of 59 for the year ending July 1, 1900, divided as follows: White deaf girls, 17; white deaf boys, 12; white blind girls, 3; white blind boys, 6; negro deaf girls, 7; negro deaf boys, 10; negro blind boys, 4. Appropriation made by the State for the support of the school was \$11,000.

The Hospital for the Insane had on Jan. 1, 1900, 561 inmates. During the eleven months ending Nov. 30, 203 patients—84 white males, 50 white females, 48 negro males, 41 negro females—were admitted, a total of 765 being under treatment during this period. On Nov. 1, 632 patients were in the hospital—200 white males, 184 white females, 131 negro males, 117 negro females. Of patients admitted between Jan. 1, 1899, and Nov. 30, 1900, 237 were natives of the State, 157 of other States, and 36 of foreign birth. The inmates of the hospital have increased 120 per cent. during the past eight years, and 162 per cent. during the past ten years. This increase is probably due to the fact that the management of the hospital so greatly improved that more patients were sent to it than in former years. The State in 1899 expended \$71,716.35 in the maintenance of the Hospital for the Insane.

Penitentiary.—On Dec. 1 there were 778 State convicts, of whom 102 were white males and 2 white females, 651 were colored males and 23 colored females. From Dec. 1, 1899, to Dec. 1, 1900, 18 convicts died, 6 were pardoned, and 14 escaped. The State has no prison, and the convicts are leased to contractors. On Dec. 1 the 778 convicts were in 7 phosphate mining camps and 6 naval stores camps. The office of Supervisor of State Convicts was created by act of Legislature in 1899, and the hours of labor, the food, clothing, and housing of the convicts was regulated by law. A marked improvement in the condition of the convicts has resulted. A reform school for minors is situated at Marianna.

Health.—The annual report of the State Board of Health, issued March 15, 1900, gives the following statistics, based upon the population of 464,639 (State census of 1895):

EAR.	Death rate per 1,000 of population.	Birth rate per 1,000 of population.
1891	13.22	14.72
1892	13.86	15.42
1893	10.02	13.68
1894	11.66	15.47
1895	9.60	13.80
1896	8.63	13.18
1897	8.09	11.19
1898	11.29	14.23
1899	11.67	15.50
Average	10.89	13.02

In the year ending Dec. 31, 1899, there were in the State 8,180 births, 5,390 deaths, 6,112 marriages.

Yellow fever appeared in epidemic form at Key West and Miami, introduced from Cuba, in the summer and autumn of 1899. The disease was very mild, and the mortality was light. Stringent quarantine regulations prevented its spread, and the disease did not reappear in 1900.

In the spring of 1900 the Marine Hospital Service established a detention station for the Southern States, which Surgeon-General Wyman declares to be the best equipped of five or six similar stations kept up by the Marine Hospital Service. It is on the main line of the Savannah, Florida and Western Railroad, on the south side

of St. Mary's River, where it divides Florida from Georgia. It will accommodate 2,000 persons, and can be made ready at twenty-four hours' notice.

Political.—The Democratic State Convention met in Jacksonville, June 19, and nominated the following ticket: For Governor, William S. Jennings; Justice of the Supreme Court, Francis Carter; Secretary of State, John L. Crawford; Comptroller, W. H. Reynolds; Attorney-General, W. B. Lamar; Superintendent of Public Instruction, W. N. Sheats; State Treasurer, J. B. Whitefield; Commissioner of Agriculture, B. E. McLendon; Railroad Commissioner, J. L. Morgan.

The platform approved the Chicago platform of 1896, and the stand taken by William J. Bryan on all great questions since that time; denunciation of maintenance of a large standing army, imperialism and trusts; favored an income tax, reduction of tariff to a revenue basis; demanded repeal of all taxes, and a return to Democratic principles of economy.

On State issues the platform said: "We declare in favor of the most liberal support and development of the public school system.

"We favor the passage of such laws as will tend to the improvement of our system of public roads.

"We favor municipal ownership of all public utilities, pledging the passage of such laws, and necessary, such constitutional amendments as will enable municipalities to acquire, own, and operate all such utilities, and the passage of such laws as will, until such ownership, prohibit the grant of municipal franchises for more than a limited term of years, and without the consent of municipal electors expressed at an election.

"We favor the nomination of all candidates for office, both State and county, and of United States Senators, by a majority vote in white Democratic primary elections, held under the provisions of law.

"We demand a radical reform of the State convict system."

The platform declared that the question of removal of the State capital from Tallahassee to the holding of a constitutional convention should be settled by the white Democratic electors of the State, at a primary to be held at the time of holding the State election, Nov. 6.

On Sept. 12 the Prohibitionists met at Ocala and chose candidates for presidential election. A. M. Morton was nominated for Governor, and no other State nominations were made. Resolutions were passed approving the action of the National Prohibition party at Chicago in 1899, condemning the liquor trade, and requesting voters to withhold support from all candidates who were not pledged to use their influence against liquor.

The Republican convention held two meetings the first on Jan. 19, at St. Augustine, the second at Ocala, on July 21. The following ticket was nominated: For Governor, Mathew B. Macfarlane; Secretary of State, George W. Allen; Attorney-General, Frederick Cubberly; Treasurer, W. G. Robinson; Comptroller, John W. Powell; Superintendent of Public Instruction, George Holmes; Commissioner of Agriculture, Otto Butterwick; Justice of Supreme Court, Henry Goodell; Railroad Commissioner, Lambert Ware.

The convention adopted a platform approving the administration of President McKinley and declaring for the gold standard. On State issues the platform declares:

"We demand legislative enactments providing that State convicts from the several counties employed in the construction of good roads be returned to their respective counties.

"We condemn the policy of the Democratic party, as declared in its platform of principles, relative to the question of capital removal, confining its settlement exclusively to white Democratic voters and Democratic primary alone, thus ignoring contemptuously the rights of all electors of other political parties and property owners to participate in a general election, which should be provided for by general law relating to the same."

The People's party and the Social Democrats of the State nominated presidential electors, but put no State tickets in the field.

The State being overwhelmingly Democratic, all interest in the campaign centered on the question of the removal of the capital and on the four proposed amendments to the Constitution. Jacksonville, Ocala, St. Augustine, and Gainesville were candidates for the capital, in opposition to Tallahassee. Gainesville withdrew before the close of the campaign.

The official returns of the election in November gave: For President—Bryan (Democrat), 28,007; McKinley (Republican), 7,499; Populist, 1,090; Prohibitionist, 2,239; Social Democrat, 603. For Governor—Jennings (Democrat), 29,251; Macfarlane (Republican), 6,438; Morton (Populist), 631.

The vote on the constitutional amendments was as follows: To provide for representation of new counties in the Legislature—for, 6,495; against, 4,511. To prohibit special legislation in favor of corporations—for, 6,159; against, 4,458. To provide for election of county commissioners—for, 8,891; against, 3,706. To provide for new State seal and State flag—for, 5,601; against, 4,121. The vote on location of the State capital was: Tallahassee, 0,328; Jacksonville, 5,946; Ocala, 3,373; St. Augustine, 1,800.

Seventeen Senators and 68 members of the House of Representatives were elected to the Legislature of 1901, all Democrats. The State government is solidly Democratic.

FRANCE, a republic in western Europe, proclaimed Sept. 4, 1870, when the Emperor Napoleon II was deposed. The Constitution of Feb. 24, 1875, vests the legislative power in the Chamber of Deputies and the Senate, forming together the National Assembly, and the executive power in the President of the republic and the Council of Ministers. The National Assembly, united in Congress, elects the President for the term of seven years, and has authority to revise the Constitution when convened for that purpose by the resolve of both houses. The Constitution has been modified by the additional laws of Aug. 2 and Nov. 30, 1875, Dec. 9, 1884, June 16, 1885, and July 1, 1889. The Senate is composed of 300 members, elected in the departments for the term of nine years, one third retiring every third year. The electoral body consists of the Senators and Deputies of the department, the departmental and district councils, and delegates of the communal councils. Under the former law 75 of the Senators were elected originally by the National Assembly, afterward by the Senate, for life, and now at the death of one of these life Senators his place is filled by a Senator elected for the usual term by one of the departments, determined by lot. There were 16 life Senators still surviving in September, 1899. The Chamber of Deputies is composed of 584 members, one to each arrondissement having less than 100,000 inhabitants, two when the population is greater, the arrondissement being then divided into two electoral districts. Every male citizen twenty-one years of age can vote for the Deputy in his arrondissement if he has resided six months in one town or commune and is not serving in the army or otherwise disqualified. In 1898 there were

10,231,532 registered electors, of whom 7,657,420 voted. Officers and soldiers of the active army and the majority of public functionaries are not eligible to the Chamber. The ministers are responsible to the Chamber. In case of defeat on a Cabinet question the President selects a new Premier Minister representing the victorious party or combination, who in consultation with the President selects his colleagues. The President can dissolve the Chamber with the consent of the Senate. He has authority to conclude treaties by the advice of his ministers, but can not declare war without the assent of both Chambers. Every act of the President must be countersigned by the minister in whose department it falls.

The President of the republic is Émile Loubet, elected Feb. 18, 1899. The ministry formed June 22, 1899, was composed as follows: President of the Council and Minister of the Interior and of Public Worship, M. Waldeck-Rousseau; Minister of Foreign Affairs, M. Delcassé; Minister of Finance, M. Caillaux; Minister of War, Major-Gen. de Gallifet; Minister of Marine, M. Lanessan; Minister of Public Instruction, Georges Leygues; Minister of Public Works, P. Baudin; Minister of Agriculture, Jean Dupuy; Minister of Commerce, Industry, and Posts and Telegraphs, M. Millerand; Minister of the Colonies, M. Decrais; Minister of Justice, M. Monis.

Area and Population.—The area of France is 204,092 square miles. The population on March 29, 1896, was 38,517,975, nearly 189 to the square mile. The foreigners numbered 1,027,491, or 2.66 of the total population. The number of public officials and employees, including those in Algeria, was 384,038, exclusive of the army and navy, but including 44,863 clergymen, 121,712 teachers, and 6,560 judges and magistrates, and their total annual pay amounted to 585,363,000 francs. The number of unpaid officials, such as mayors of communes and members of councils, was 462,500. The number of marriages in 1898 was 287,179; of births, 843,933; of deaths, 810,073; excess of births, 33,860. The number of divorces was 7,238. Paris, in 1896, had 2,536,834 inhabitants; Lyons, 466,028; Marseilles, 442,239; Bordeaux, 256,906; Lille, 216,276; Toulouse, 149,963. There were 89,915 primary schools in 1898, with 153,505 teachers and 5,535,125 enrolled pupils; 30,368 evening schools for adults, with 483,000 pupils; 109 lycées, with 52,372 pupils; 229 communal colleges, with 33,949 pupils; 202 lay private schools, with 9,727 pupils; and 438 clerical schools, with 67,643 pupils; 40 lycées for girls, with 8,431 pupils; 28 colleges for girls, with 3,563 pupils; 51 secondary courses for girls, with 4,239 pupils; and in the universities there were 142 students of theology, 8,939 studying law, 3,435 students of science, 2,804 in the faculties of letters, 3,026 studying pharmacy, and 8,153 medical students in January, 1899, besides 969 students in outside medical schools and 786 university students in Algeria. Of the total number of 28,254 students 1,399 were foreigners and 817 were women, including 258 foreigners.

Finances.—The budget estimate of revenue for 1899 was 3,477,575,535 francs, of which 3,423,609,469 francs constituted the general budget of France and 54,152,371 francs the Algerian budget. Of the revenue collected in France 472,181,557 francs were direct contributions and 36,363,527 francs taxes assimilated to direct contributions; 2,035,726,450 francs were indirect taxes, including 526,904,000 francs from registration, 179,219,400 francs from stamps, 5,526,000 francs from the tax on bourse transactions, 72,078,100 francs from the tax on income from personal property, 441,492,050 francs from customs duties, 624,012,000 francs

from indirect contributions, and 186,494,900 francs from the sugar duty; 691,007,100 francs came from state monopolies, including 395,319,000 francs from tobacco, 43,605,000 francs from matches and gunpowder, 235,399,400 francs from the post office and telegraphs and telephones, and 16,683,700 francs from the mint, railroads, and various other monopolies; 62,219,410 francs came from domains and forests, 56,621,694 francs were miscellaneous receipts, and 67,498,731 francs for *recettes d'ordre*. The total budget of expenditure was 3,477,575,535 francs, including 73,012,516 francs for Algeria. Of 3,404,563,019 francs expended in France 1,249,896,915 francs were for the public debt, 13,302,560 francs for the President, Chamber of Deputies, and Senate, 20,034,610 francs for the Ministry of Finance, 35,112,933 francs for the Ministry of Justice, 16,076,800 francs for the Ministry of Foreign Affairs, 76,644,327 francs for the Ministry of the Interior, 43,024,553 francs for the Ministry of Worship, 649,496,036 francs for the Ministry of War, 303,600,510 francs for the Ministry of Marine, 217,432,696 francs for the Ministry of Education and the Fine Arts, 35,653,153 francs for the Ministry of Commerce, Industry, Posts, and Telegraphs, 90,794,762 francs for the Ministry of the Colonies, 30,701,433 francs for the Ministry of Agriculture, 187,619,864 francs for the Ministry of Public Works, 218,111,881 francs for *régie*, collection of taxes, etc., 176,800,824 francs for the post office and telegraphs, and 40,259,162 francs for repayments. The capital valuation of the debt of France on Jan. 1, 1899, was 29,948,331,297 francs, consisting of 22,002,683,638 francs of perpetual *rentes*, 6,930,154,925 francs of redeemable debt, including the Morgan loan of 199,514,454 francs, 1,902,515,260 francs of annuities to railroads, and 4,828,125,211 francs of other obligations, and the floating debt, reported to amount to 1,015,492,734 francs. The annual amount of *rentes* is 692,157,850 francs; interest and amortization of the redeemable debt, 314,109,110 francs; interest on floating debt, 241,518,402 francs; total annual charge, 1,247,785,362 francs, as set down in the budget for 1900. The debt is about \$150 per head of population. The annual income of the nation has been estimated at 25,000,000,000 francs, of which 15,000,000,000 francs are the fruits of personal labor. The private wealth of France has been estimated at 202,000,000,000 francs, of which 75,000,000,000 francs represent land, 50,000,000,000 francs buildings, 5,000,000,000 francs specie, 70,000,000,000 francs securities, 10,000,000,000 francs farm implements and live stock, and 17,000,000,000 francs other personal property. By the conversion of 5 per cents. into 4½ per cents. in 1883 an annual saving of 34,000,000 francs was effected, a further saving of 5,000,000 francs by the conversion of old 4½ and 4 per cents. into 3 per cents. in 1887, and one of 68,000,000 francs by the conversion of the 4½ per cents. into 3½ per cents., making a total reduction of 107,000,000 francs in the annual cost of the national debt. The refunding of 3½ and 3 per cents. at 2½ per cent. was contemplated when the 3 per cents. stood above par, but has been delayed owing to the fall in *rentes*.

The Army.—The period of military duty is from the age of twenty to that of forty-five. Every Frenchman fit for service is liable to serve three years in the active army, ten years in the reserve, six years in the territorial army, and six years in the territorial reserve. Students and seminary students are only required to perform one year of active service, provided that they complete their studies. The peace strength as fixed in the budget of 1900 is 540,405 of all ranks in France, 60,102 in Algeria, and 15,968 in Tunis. The number of officers is

26,847 in France, 2,309 in Algeria, and 584 in Tunis. The general staff in France numbered 3,636 officers, with 702 men; in Algeria, 294 officers, with 95 men; in Tunis, 69 officers, with 24 men. In the military schools were 3,644 men, including 420 officers. Unclassed amid the troops were 1,960, of whom 1,707 were officers, in France; 779, of whom 560 were officers, in Algeria; and 111, of whom 107 were officers, in Tunis. In the 19 army corps of France there were 328,703 infantry, including 12,152 officers; 11,881 administrative troops; 66,671 cavalry, including 3,490 officers; 77,769 artillery, including 3,891 officers; 12,299 engineers, including 484 officers; and 8,519 train, including 360 officers; a total of 505,842 men, including 20,377 officers. The gendarmery numbered 21,571 men, including 624 officers; the Republican Guards, 3,050 men, including 83 officers. In Algeria the infantry numbered 41,001 men, including 954 officers; the administrative troops, 3,512 men; the cavalry, 7,597 men, including 365 officers; the artillery, 2,716 men, including 53 officers; the engineers, 802 men, including 13 officers; the train, 2,114 men, including 39 officers; total, 57,742 men, including 1,424 officers. The Algerian gendarmery numbered 1,192 men, of whom 31 were officers. In Tunis there were 11,202 infantry, including 280 officers; 534 administrative troops; 1,853 cavalry, including 86 officers; 993 artillery, including 21 officers; 325 engineers, including 4 officers; and 714 train, including 13 officers; total, 15,621 men, including 404 officers, besides 143 gendarmes, including 4 officers. Deducting the men on furlough and sick leave and other vacancies, the present strength of the active army is 539,515 officers and men and that of the gendarmery and Republican Guards is 25,693. Including vacancies and furloughs, the active army in France numbered 515,784 men, including 26,140 officers, with 114,601 horses; in Algeria, 58,910 men, including 2,378 officers, with 12,548 horses; in Tunis, 15,825 men, including 580 officers, with 3,556 horses; total active army, 590,519 men, including 28,998 officers, with 130,705 horses; total gendarmery, 22,906 men, including 659 officers, with 11,830 horses; grand total, including Republican Guards, 616,475 men, of whom 29,740 were officers, with 143,275 horses. The number of men liable to service in case of war is estimated to be 2,350,000 in the active army and its reserve, 900,000 in the territorial army, and 1,100,000 in the territorial army reserve; total, 4,350,000 men, of whom not more than 2,500,000 could be counted on for effective service. France is divided into 19 regions, and Algeria makes another region, each occupied by an army corps. But the active army is not organized on a territorial basis. In every regiment are commingled recruits from every part of France, and the same system is continued in the reserves. There are 145 regiments of infantry of the line in France of 4 battalions each, 19 regional regiments of 4 battalions for garrisoning the fortresses, 18 battalions of chasseurs, and 12 battalions of mountain chasseurs, making in all 658 battalions. In Algeria and Tunis there are 4 regiments of zouaves of 5 battalions, 4 regiments of Algerian rifles, called Turcos, of 6 battalions, 2 regiments of the foreign legion of 5 battalions, 1 company of Saharan rifles, and 5 battalions of African light infantry. The infantry is armed with the Lebel rifle of the model of 1886, having 5 cartridges in the magazine and a caliber of 8 millimetres. Two of the army corps have attached to them a company of velocipedists. Each of the army corps of France has a brigade of cavalry, and there are 7 separate divisions, composed of 20 brigades or 41 regiments. In Algeria and Tunis there are 4 brigades, comprising 10 regi-

ments. The cavalry is composed of 13 regiments of cuirassiers, 31 regiments of dragoons, 21 regiments of mounted rifles, 14 regiments of hussars, 8 regiments of African chasseurs, and 4 regiments of spahis, comprising altogether 447 squadrons of 5 officers and 140 men, to be raised to 155 men in time of war. The dragoons, hussars, and chasseurs are armed with carbines of the model of 1886, the cuirassiers with revolvers. A squadron of Saharan and one of Soudanese spahis belong also to the cavalry. The field artillery consists of 19 brigades and 3 commands, comprising 40 regiments with 430 mounted batteries of 4 or 6 pieces, 52 batteries of horse artillery, 14 mountain batteries, and 12 batteries in Algeria and Tunis. The field guns are rapid firing, having a caliber of 75 millimetres. There are 18 battalions of fortress artillery, with 105 batteries, besides 7 batteries in Algeria and Tunis. The guns have 95, 200, and 270 millimetres caliber, the mortars a caliber of 15 centimetres, and rapid-firing guns have been introduced with a caliber of 12 centimetres. The engineers comprise 1 regiment of sappers and miners of 4 battalions and 1 company of sapper conductors, 5 regiments of sappers and miners of 3 battalions and 1 company of sapper conductors, 1 regiment of railroad sappers, and 7 companies of sapper conductors. There are 20 squadrons of train, 16 having 3 and 4 having 6 companies, 12 of the companies being in Algeria.

There are 145 regiments of infantry reserves of 3 battalions in time of peace formed of the complementary cadres of the regiments of the line, and besides these there are 30 battalions of reserve chasseurs; 40 regiments of reserve cavalry are, like the infantry reserves, linked to the active regiments of the line, and the 41 regiments of the independent cavalry divisions have each its adjunct reserve regiment, and for each brigade of artillery there are 12 batteries of reserves.

The Navy.—By the law of 1898 the authority of the chief of staff, a vice-admiral who assists the Minister of Marine in directing the affairs of the navy, was enlarged so as to give him, subject to the approval of the minister, full charge of the construction, maintenance, putting into commission, and mobilization of the ships. The expenditure on the navy has increased, with fluctuations, from 201,000,000 francs in 1890 to 304,000,000 francs in 1899. The personnel of the navy in 1898 comprised 15 vice-admirals, 30 rear-admirals, 125 captains, 215 commanders, 758 lieutenants, 420 sub-lieutenants, and 170 midshipmen, making a total of 1,733 commissioned officers and 40,589 men, including warrant officers. The navy is manned partly by conscription among the seafaring population and partly by voluntary enlistment. The sailors inscribed in the naval reserve number 14,000. The armor-clad fleet in 1899 comprised 34 battle ships averaging over 10,000 tons (Amiral Baudin, Amiral Duperré, Colbert, Dévastation, Formidable, Courbet, Friedland, Hoche, Magenta, Mareau, Neptune, Redoutable, Richelieu, Suffren, Trident, Brennus, Calman, Indomptable, Requin, Terrible, Bouvines, Jemmapes, Amiral Tréhouart, Valmy, Carnot, Charles Martel, Jauréguiberry, Masséna, Bouvet, Charlemagne, Saint-Louis, Henri IV, Gaulois, and Jena), 5 heavily armored cruisers with guns mounted in barbette (Bayard, Duguesclin, Turenne, Vauban, Victorieuse), 7 coast-guard turret and barbette ships built before 1883 (Fulminant, Furieux, Onondaga, Tempête, Tonnerre, Tonnant, Vengeur), 7 armored cruisers, averaging 5,250 tons, built since 1890 (Dupuy de Lôme, Amiral Charner, Chanzy, Latouche-Treville, Bruix, Pothuan, D'Entrecasteaux), 2 new deck-protected cruisers of over 8,000 tons, having a

powerful rapid-fire armament and capable of making 23 knots (Guichen, Chateaufort), 2 powerful armored cruisers, the latest type, exceedingly rapid and armed with a pair of 7.6-inch guns and a strong quick-firing equipment (Jeanne d'Arc, Montcalm), 8 first-class cruisers built between 1876 and 1889 (Duquesne, Tourville, Sfax, Tage, Cécille, Jean Bart, Alger, Isly), 16 second-class cruisers built between 1877 and 1897 (Aréthuse, Iphigénie, Nafade, Dubourdieu, Davout, Suchet, Bugeaud, Chasseloup-Laubat, Friant, Pascal, Descartes, D'Assas, Du Chayla, Cassard, Catinat, Duguay-Trouin), 18 third-class cruisers built between 1878 and 1898 (D'Estaing, Primauguet, Nielly, Fabert, La Clocheterie, Éclaireur, Amiral Rigault de Genouilly, Milan, Surcouf, Forbin, Lalande, Troude, Cosmao, Coëtlogon, Linois, Galilée, Lavoisier, D'Estrées), 1 torpedo depot ship (Foudre), 8 armored gunboats built between 1884 and 1892, 11 gunboats built between 1878 and 1896, 7 first-class and 5 second-class avisos, 24 transports, 8 sloop screw gunboats, 2 side-wheel gunboats, 10 side-wheel steamers, 10 destroyers built between 1885 and 1898, 10 torpedo dispatch boats, 33 sea-going torpedo boats, 108 first-class, 84 second-class, and 30 third-class torpedo boats, 6 torpedo vedettes, and 3 submarine torpedo boats. There were under construction in the beginning of 1900 2 armored cruisers (Dupetit-Thouars, Gueydon), sister ships to the Montcalm, having a displacement of 9,517 tons, engines of 20,000 horse power, giving a speed of 21 knots, and an armament of 2 7.6-inch, 8 6.4-inch quick-firing, 4 4-inch, and 24 smaller guns; 3 of the same type, with the same speed and the same armament (Gloire, Condé, Sully), having a length of 453 feet, 64 feet beam, and 23 feet mean draught, protected by 6 inches of armor at the water line, thinner side armor above, and armored and splinter-proof decks, the heavy guns mounted in turrets, the rest in casemates; 2 made slightly larger to carry 2 additional 4-inch quick firers (Marseillaise, Amiral Aube); 3 of a smaller type, 7,700 tons, with engines of 17,100 horse power, capable of making 21 knots, armed with 10 6.4-inch and 16 small quick firers (Kléber, Desaix, Dupleix); and 1 deck-protected cruiser, of 5,500 tons, with engines of 17,000 horse power, designed to give a speed of 23 knots, carrying a battery of 8 6.4-inch quick firers and 12 of 1.8-inch bore (Jurien de la Gravière).

The Minister of Marine proposed the construction of 6 new battle ships, of 14,865 tons, with 12 inches of armor over vital parts, to have a speed of 18 knots and carry 4 12-inch and 18 6.4-inch guns; 5 armored cruisers, of 12,600 tons, able to steam 22 knots, and equal in armament and protection to the new Drake class in England; also 28 destroyers, 112 new torpedo boats, and 38 submarine craft. If this programme were carried out the navy in 1907 would consist of 28 battle ships, 24 armored cruisers, 52 destroyers, 263 torpedo boats, and 38 submarine torpedo craft. The cost of the new constructions was put at 800,000,000 francs, which was believed by the opponents of the new programme, who objected especially to the building of more large battle ships, to be too low an estimate. The Government decided to build the cruisers, 3 to be completed in 1901 and the other 3 before 1905, and to postpone the construction of battle ships, except one that was to be ready in three years.

Commerce and Production.—The area cultivated as farm and garden land and pasture in France is 36,977,098 hectares out of a total area of 52,921,578 hectares, of which 8,397,131 hectares are covered with forest. The production of wheat on 6,963,711 hectares in 1898 was 128,096,149 hec-

tolitres; of grass and hay on 5,612,858 hectares, including permanent pasture, 284,092,995 quintals; of oats on 3,887,505 hectares, 98,064,158 hectolitres; of wine from 1,648,493 hectares of vineyards, 31,730,992 hectolitres; of rye on 1,474,915 hectares, 23,524,318 hectolitres; of potatoes on 1,542,967 hectares, 118,321,602 quintals; of clover on 1,134,615 hectares, 44,306,732 quintals; of barley on 814,463 hectares, 16,519,611 hectolitres; of buckwheat on 569,783 hectares, 7,566,143 hectolitres; of Indian corn on 561,689 hectares, 8,280,025 hectolitres; of turnips and beets on 436,120 hectares, 104,633,354 quintals; of beet-root sugar from 262,251 hectares, 65,935,449 quintals; of mixed grain on 236,060 hectares, 4,225,674 hectolitres; of colza on 50,279 hectares, 933,140 quintals; of flax from 19,271 hectares, 113,969 quintals of fiber and 90,696 quintals of seed; of hemp from 29,250 acres, 206,189 quintals of fiber and 88,104 quintals of seed; of tobacco from 16,892 hectares, 202,951 quintals. The nuts, apples, plums, and mulberry leaves produced in 1898 were valued at 201,191,033 francs, oranges and lemons at 1,808,715 francs. The number of domestic animals on Dec. 31, 1898, was 2,894,379 horses, 208,227 mules, 361,728 donkeys, 13,418,687 cattle, 21,277,582 sheep, 6,230,966 hogs and 1,501,658 goats. The production of cocoons in 1898 was 6,893,033 kilogrammes; of raw silk, 3,934,329 kilogrammes, value 90,332,550 francs. The value of mining products in 1897 was 377,825,285 francs. The production of coal and lignite was 30,797,900 tons; of iron ore, 4,582,000 tons; of pig iron, 2,484,200 tons; of manufactured iron, 784,000 tons; of steel, 1,325,213 tons; of silver and lead ore, 21,212 tons; of zinc ore, 83,044 tons; of manganese ore, 37,212 tons; of salt, 948,003 tons; of antimony ore, 4,635 tons. The imports of woolen yarn in 1898 were 10,000,000 francs in value, and exports 29,500,000 francs; imports of woolen cloth were 38,300,000 francs, and exports 222,800,000 francs; imports of silk manufactures 50,900,000 francs, and exports 250,600,000 francs. Besides 31,730,000 hectolitres of wine produced in 1898 6,555,000 hectolitres were imported, while the total export was only 1,381,000 hectolitres. The cider product was 10,637,000 hectolitres. The production of alcohol was 2,412,460 hectolitres. The quantity of codfish and cod-liver oil landed in 1898 was 547,421 metric quintals; of herring, 422,992 quintals.

The general commerce in 1898 amounted to 5,582,600,000 francs for imports and 4,673,500,000 francs for exports. The value of the special imports in 1898 was 4,472,500,000 francs, and in 1899 it was 4,217,000,000 francs, of which 1,020,000,000 francs were food substances, 2,506,000,000 francs raw materials, and 691,000,000 francs manufactured goods, against 1,506,000,000 francs for food, 2,348,000,000 francs for raw products, and 618,000,000 francs for manufactures in 1898. The special exports, or exports of French products and manufactures, in 1898 was 3,510,000,000 francs, consisting of 663,000,000 francs' worth of food products, 932,000,000 francs' worth of raw materials, and 1,916,000,000 francs' worth of manufactured goods, and in 1899 the total value was 3,899,000,000 francs, of which 681,000,000 francs represent food substances, 1,084,000,000 francs raw materials, and 2,134,000,000 francs manufactured goods. The imports of cereals in 1898 were valued at 632,000,000 francs; raw wool, 387,100,000 francs; wine, 309,900,000 francs; raw silk, 233,900,000 francs; coal, 207,200,000 francs; raw cotton, 166,200,000 francs; timber and wood, 147,300,000 francs; oil seeds, 137,800,000 francs; hides and fur skins, 129,700,000 francs; coffee, 107,200,000 francs; ores, 70,800,000 francs; flax, 52,000,000 francs; silk

manufactures, 50,900,000 francs; cattle, 40,800,000 francs; woolen manufactures, 38,300,000 francs; cotton manufactures, 37,600,000 francs; sugar, 29,900,000 francs. The exports of silk goods of French manufacture in 1898 were valued at 250,600,000 francs; woolen manufactures, 222,800,000 francs; wine, 218,300,000 francs; raw wool and woolen yarn, 185,700,000 francs; fancy goods, 140,400,000 francs; cotton manufactures, 128,700,000 francs; raw silk and yarn, 118,900,000 francs; leather, 109,200,000 francs; *lingerie* and confections, 91,800,000 francs; skins and furs, 87,400,000 francs; cheese and butter, 80,900,000 francs; metal goods and tools, 79,100,000 francs; chemical products, 75,300,000 francs; leather wares, 73,900,000 francs; liquors, 48,000,000 francs; refined sugar, 38,000,000 francs.

The values in francs of the special imports from the principal countries in 1898 and 1899 are given in the following table:

COUNTRIES.	1898.	1899.
Great Britain	506,000,000	532,000,000
United States	623,000,000	400,000,000
Germany	335,000,000	345,000,000
Belgium	815,000,000	811,000,000
Argentine Republic	251,000,000	253,000,000
Spain	325,000,000	238,000,000
Russia	268,000,000	182,000,000
Italy	188,000,000	150,000,000
British India	191,000,000	.....
Algeria	225,000,000	.....

The values of the exports to the principal foreign countries were in francs as follow:

COUNTRIES.	1898.	1899.
Great Britain	1,022,000,000	1,181,000,000
Belgium	549,000,000	555,000,000
Germany	394,000,000	428,000,000
United States	210,000,000	296,000,000
Switzerland	303,000,000	304,000,000
Italy	143,000,000	173,000,000
Spain	88,000,000	186,000,000
Algeria	225,000,000	.....
Brazil	55,000,000	57,000,000
Argentine Republic	49,000,000	51,000,000

Of the total value of imports in 1898 the value that came by land was 1,540,000,000 francs, and by sea 4,042,000,000 francs, of which 1,579,000,000 francs came in French ships and 2,463,000,000 francs in foreign ships. Of the exports 1,607,000,000 francs went by land carriages and 3,066,000,000 francs in ships, of which 1,596,000,000 francs were borne in French and 1,470,000,000 francs in foreign ships. The transit trade in 1898 amounted to 790,000,000 francs. The share of the principal ports in the total general import and export trade in 1898 was as follows: Marseilles, 1,951,000,000 francs; Havre, 1,693,000,000 francs; Paris, 733,000,000 francs; Bordeaux, 676,000,000 francs; Dunkerque, 663,000,000 francs; Boulogne, 473,000,000 francs; Rouen, 267,000,000 francs; Dieppe, 254,000,000 francs; Calais, 243,000,000 francs; Tourcoing, 194,000,000 francs; Certe, 164,000,000 francs. The imports of gold coin and bullion in 1898 were 199,407,834 francs, and exports 313,207,577 francs; imports of silver coin and bullion 191,372,520 francs, and exports 188,591,251 francs; total specie imports, 390,780,354 francs; total exports of specie, 501,798,828 francs.

Navigation.—The total number of vessels entered at French ports in 1898 was 103,059, of 23,857,951 tons, of which 82,094, of 11,907,268 tons, were French and 20,965, of 11,950,683 tons, were foreign; the total number cleared was 103,876, of 24,297,315 tons, and of these 82,585, of 12,220,972 tons, were French and 21,291, of 12,076,343 tons,

foreign. The French vessels entered comprised 553, of 4,611,561 tons, engaged in the foreign trade and 73,561, of 7,295,707 tons, in the coasting trade; of those cleared 9,024, of 4,925,265 tons, were in the foreign and 73,561, of 7,295,707 tons, in the coasting trade. Included in the French marine in the foreign trade are the vessels of the colonies and those in the sea fisheries. The merchant marine on Jan. 1, 1899, consisted of 14,406 sailing vessels, of 414,673 tons, with 67,583 men their crews, and 1,209 steamers, of 485,617 tons, with crews numbering 20,627. The sailing vessels plying European waters numbered 150, of 14,824 tons, and 271, of 178,307 tons, navigated the seas; all the rest were employed in the coasting trade or the fisheries or in port service. The Government gives 16,000,000 francs a year in premiums for building and navigating vessels and 50,000 francs to encourage the cod fisheries.

Railroads, Posts, and Telegraphs.—The length of railroads in operation in 1898 was 23,324 miles, besides 2,404 miles for local traffic. In 1899 the railroads of general interest had a length of 23,576 miles. The length of tramways at the end of 1899 was 2,319 miles. The main lines of railroad were built by companies under the supervision and partly with the assistance of the state. They belong to six companies, and will revert to the Government between 1950 and 1960. The Government guarantee of interest expires in 1914 for four of the companies, in 1934 for another, and in 1935 for the last. The Government built and is the owner of 1,700 miles of railroad. The cost of railroads up to 1897, when they had a length of 23,152 miles, was 15,898,000,000 francs. There were 374,755,000 passengers carried in 1897, and 3,399,000 tons of freight. The expenses in 1897 were 606,775,000 francs; receipts, 1,335,350,000 francs.

The number of letters sent through the post office in France and Algeria in 1897 was 952,000,000, of which 795,745,000 were internal and 156,255,000 international; registered letters and telegrams, 46,550,000, of which 44,062,000 were internal and 2,488,000 international; of postal cards, 167,000, of which 51,681,000 were internal and 115,319,000 international; of newspapers, circulars, tracts, etc., 1,305,764,000, of which 1,153,575,000 were internal and 152,189,000 international.

The telegraph system on Jan. 1, 1898, consisted of 2,952 miles of lines, with 218,684 miles of wire. The number of dispatches in 1897 was 44,515,175, of which 36,799,740 were internal, 5,158,911 international, 1,116,142 transit, and 1,440,382 official. There is in Paris a pneumatic tube system with 10 miles of tubes. The telephone systems of France had 10,510 miles of line and 99,890 miles of wire in the towns, and there were 103,807,528 conversations in 1897. The long-distance circuits, of which there were 809, had 12,892 miles of line and 34,510 miles of wire, and there were 1,916,966 conversations in 1897.

Dependencies.—The colonies and protectorates of France have an estimated total area of 4,307,000 square miles and a population of 60,000,000. Algeria is regarded as a part of France, and has no separate Legislature. The Governor General communicates with the ministers of the different departments in regard to the administration, and is assisted by a council of 15 members, which discusses and votes the annual budget, while the departments of finance, justice, and public instruction, public works, and native affairs have local officials to direct them. Tunis is under the protectorate of France, and is practically ruled by a French ministry selected and directed by the Minister of Foreign Affairs. The colonies proper have elective

councils to assist the Governor besides representation in the French Chambers in the case of the older colonies and delegates in the Superior Colonial Council in the case of the others. The Senators and Deputies of the colonies have seats in this council, and officials and private individuals who are appointed on account of their local or expert knowledge. Most of the colonies receive assistance from the French Government in the form of grants of money voted by the Chambers, which amounted in 1900 to 89,768,262 francs, while the receipts of the French treasury from colonial services were 4,730,540 francs. Naval and military expenditures incurred in the colonies are not as a rule included in these votes, but in the budgets of the Ministries of War and Marine.

Andorra is a semi-independent republic in the Pyrenees, partly under the suzerainty of France, which is exercised through the prefect of the department of Pyrénées Orientales. The heads of families elect the Legislative Council of 24 members, which elects the syndic who presides over the executive. The judicial magistrates are appointed alternately by the French Government and the Spanish Bishop of Urgel. The area of the republic is 175 square miles and the population about 6,000.

Algeria is divided into the three departments of Algiers, Oran, and Constantine, each of which elects a Senator and two Deputies to the National Assembly. The Governor General is M. Jonnart, who in November, 1899, succeeded M. Laferrière, appointed in 1898. The area is 184,474 square miles, with a population in 1896 of 4,429,421, of whom 3,873,278 were found in the civil area and 556,143 in the military territory. The French population in 1896 numbered 318,137; foreign population, 446,343. Of the native population about 75 per cent. consists of Kabyles or Berbers, 15 per cent. of Arabs, and 10 per cent. of Moors, Turks, negroes, etc. Outside of the boundaries of Algeria is the Algerian Sahara, having an area of 123,500 square miles and about 50,000 inhabitants. The city of Algiers in 1899 had 96,784 inhabitants; Oran, 85,081; Constantine, 51,997. The natives are all Mohammedans, the Jews now having the status of French citizens. In the primary schools, of which there were 1,161 in 1897, with 62,873 boys and 41,334 girl pupils, instruction is given in French or Arabic. There were 52,108 French, 19,362 Mohammedans, 14,791 Jewish, and 37,839 foreign pupils taught in 1896. The infant schools were attended by 26,075 children. The university students in Algiers in 1896 numbered 522; in the lycées maintained in the capitals of the three departments there were about 2,000, and in communal colleges 3,863. The expenditure for education in 1900 was 6,453,824 francs.

The receipts of the Government for 1900 were estimated at 55,398,711 francs from local sources, of which 12,135,331 came from direct taxes, which are paid by natives only, 8,394,400 francs from registration and stamps, 13,425,000 francs from customs, 5,583,600 francs from monopolies, 4,385,000 francs from domains and forests, 8,069,770 francs from miscellaneous sources, and 3,405,610 francs were *recettes d'ordre*. The budget of expenditure amounted to 72,144,494 francs, which does not include 55,901,310 francs for military purposes and 2,500,000 francs for the public debt. The expenditures of the different departments of the administration were 23,435,013 francs for the interior, 21,031,000 francs for public works, 8,136,448 francs for finance, 6,528,824 francs for instruction and fine arts, 6,326,099 francs for commerce, posts, etc., 3,108,590 francs for agriculture, and 2,622,250 francs for justice. The military forces in 1900 con-

sisted of 58,910 men, inclusive of 2,278 officers, with 13,470 horses. The territorial army consists of 10 battalions of zouaves, 3 squadrons of cavalry, and 10 batteries of artillery. A new force organized for operations south of Algeria consists of the Sahara tirailleurs and spahis.

There were 3,644,614 persons dependent on agriculture, 207,310 of them Europeans, in 1896. The extent of land cultivated was about 20,000,000 hectares. The production of hard wheat in 1898 was 5,780,719 quintals; of soft wheat, 1,598,598 quintals; of barley, 9,028,420 quintals; of oats, 874,402 quintals. Most of the soft wheat and of the oats is grown by Europeans, but less than 20 per cent. of the hard wheat for which Algeria is famed. There were 141,189 hectares under vines, producing 4,554,354 hectolitres of wine. More than half the vineyard proprietors are Europeans. The Government owns the cork forests, covering 281,400 hectares, which produced 5,270 tons of cut corks in 1898. The production of tobacco on 7,015 hectares was 5,324,525 kilogrammes. The cultivated olive trees number 6,500,000. The number of horses and mules in 1898 was 345,139; of asses, 255,870; of camels, 205,287; of cattle, 1,004,175; of sheep, 7,026,290; of goats, 3,526,508. Natives own 93 per cent. of the animals. The forests cover 3,247,692 hectares. Of those that are accessible and utilized only 468,395 hectares are owned by private individuals. There are 14 paying iron, zinc, lead, copper, and antimony mines. The iron ore raised in 1897 was 447,000 tons, valued at 3,316,000 francs; of zinc and lead ore, 32,445 tons, valued at 1,524,200 francs. Phosphate beds are worked by English and other companies, and new ones are being discovered frequently. The principal production is at Tebessa. The total export in 1897 was 228,141 tons, valued at 4,562,820 francs. Pottery, leather manufacture, weaving, and working esparto are considerable industries. The general imports in 1898 had a total value of 302,223,058 francs, of which 225,535,389 francs were imports from France. The value of the general exports was 285,768,687 francs, of which 232,136,851 francs were exported to France. The special imports were valued at 290,059,706 francs; special exports, 265,543,209 francs. The values in francs of imports from and exports to different countries in the special trade of 1898 are given in the following table:

COUNTRIES.	Imports.	Exports.
France	225,535,389	224,451,296
Great Britain	6,155,258	13,629,190
Morocco	17,640,351	231,515
Tunis	6,508,092	3,655,855
Russia	6,253,729	1,730,807
Spain	6,097,243	1,211,370
United States	5,296,580	867,067
Brazil	5,704,531	
Italy	1,591,326	3,310,160
Belgium	425,580	4,390,914
Germany	696,357	2,716,309
Austria-Hungary	1,555,869	846,142

The values of the chief imports in 1898 were 16,755,725 francs for cattle, 11,945,199 francs for cereals, 5,881,435 francs for coffee, 3,836,774 francs for timber, 3,166,454 francs for coal, 1,644,953 francs for hides, 1,488,953 francs for machinery, 1,408,719 francs for tobacco, and 1,231,894 francs for oils. The values of the principal exports were 6,581,304 francs for alfalfa, 5,830,732 francs for tobacco, 3,527,016 francs for iron ore, 2,610,191 francs for hides, 2,000,828 francs for cork, 1,065,412 francs for cereals, and 906,755 francs for cattle.

The number of vessels entered at Algerian ports during 1898 was 1,834, of 1,101,668 tons; cleared, 1,798, of 1,117,408 tons. Of the vessels entered 472, of 279,722 tons, and of those cleared 364, of

189,634 tons, were French. The number entered in the coasting trade was 8,627, of 1,621,623 tons. The merchant marine of Algiers on Jan. 1, 1899, comprised 657 sail vessels, of 7,420 tons, and 6 steamers, of 10,958 tons.

The railroads in operation in 1899 had a total length of 2,146 miles, including 325 miles in Tunis. The length of telegraph lines was 5,603 miles, with 12,915 miles of wire. The number of dispatches sent during 1897 was 1,882,938, of which 1,671,212 were internal, 54,250 international, and 157,476 official.

The southern part of each of the Algerian departments is a military territory governed by martial law, comprising 556,143 square miles of the officially occupied area of Algeria. This is the region constantly disturbed by the nomad Kabyles who are in chronic revolt and who occupy the attention of the large military force that France has had to maintain in Algeria chiefly on their account. French statesmen and military authorities have long recognized that these desert tribes can only be brought into subjection by taking possession of the oases from which they obtain their supplies of food. The possession of the oases is necessary also in order to establish communications with the new dominions in the centre of the continent, the Sudan. Aside from military reasons, the fact that Morocco lays claim to the principal oases has hitherto deterred the French from occupying them, although this has been the ambition of successive governors general of Algeria, and an extension of the French occupation has been achieved from time to time, not without protests from the Sultan of Morocco. The Saharan rifles and spahis were organized for the purpose of establishing French rule in this region and gradually extending it over the desert tribes until the way shall be clear for military and commercial communications between Algeria and the French sphere on the upper Nile and Lake Chad. Two columns of troops set out in late 1899 to take possession of the oases south of Oran, near the frontier of Morocco. The Algerian troops occupied Insalah, the chief place of the district of Tidikelt, on Dec. 28, 1899. This is 300 miles south of the military station of El Golé, northeast of Gurara and Tuat, the other group of oases and desert villages that the French must occupy before they can break the power of the enemies in the Sahara. Although the sedentary population of these oases is only 144,000, Arabs and white Berbers possessing the power and property, and black Berbers and negro slaves doing the work, which is to raise dates of many varieties by means of subterranean irrigation conduits, these places are the fountainhead of the opposition to the French in the Sahara, not only on the part of the rebellious Kabyles but of the Tuaregs, who contest French supremacy in the Sudan. The chief center of anti-French intrigues has been Insalah, but in all these oases the ruling races are bitterly opposed to the French, although among the lower orders there has grown up a feeling in favor of French rule as preferable to the tyranny of Arabs and the exactions of Tuaregs. The Sultans of Morocco have clung to their shadowy sovereignty because the original seat of their family was the oasis of Tafilet, adjoining this region, and when the French first turned their attention to this country, about 1860, the inhabitants of Tuat sent a deputation to Morocco offering tribute and appealing to the Sultan to protect them against the fanatical Tuaregs. Their hostility to the French has been intensified since the missionaries of the Sheikh Senoussi appeared among them, though the Sultans have material reasons for opposing French civilization, controlling as they do not only

resources and labor of the country but the trade routes between the Soudan and the Mediterranean east and between Morocco and Tripoli. The occupation of Insalah was followed on March 19, 1900, by the conquest of Inhar, the chief place in the oasis of Gurara, after hard fighting by a force commanded by Col. D'Eau, which killed over 600 of the inhabitants. This movement to the westward led to a concentration of Moorish forces at Figuig, which was also threatened, as it lies near the route of the railroad that has been built from Tananariva southward and has had its terminus at Ain el-Fra, on the northern slope of the Atlas range, 70 miles northwest of Figuig. The continuation south of the mountains is to be through Igli and Tuat. In February, 1900, it was opened to Jenien-bu-zezz, and preparations were made to extend it to the French military post of Duveyrier, near Figuig, and thence to Tuat and Tidikelt, by way of Igli, soon as the occupation of the oases could be completed. On March 25 Col. Bertrand marched with a strong column of foreign legionaries, Algerian troops, African mounted rifles, spahis, artillery, and engineers, with a train of 2,500 camels, against Igli, which surrendered without fighting on April 1. This place, lying south of Figuig, was claimed as Moorish territory, and its occupation was suspected to be preliminary to an attack on the Moorish oasis of Tafilalet. Although the French government denied such intention, the frontier tribes gathered to retake Igli. The Sultan dispatched an envoy to Tangiers to protest to the representatives of the powers against what was alleged to be an invasion of Moorish territory. Igli lies south of Morocco, not of Algeria, and in the boundary treaty of 1845 France recognized as Moorish territory the Tuat oases, which are east of the boundary line of Morocco extended. Great Britain was precluded from interfering in the dispute by the agreement of 1890, which practically recognized the oases of Tuat, Tidikelt, and Gurara lying within the French sphere. The occupation of Gurara was completed on May 26 by Col. Meustrel. The inhabitants in general welcomed the French, who as far as they pushed their occupation gave employment to the poverty-stricken laboring population and paid much higher wages than they had ever received. The district of Timmoun was annexed later, and instructions were given to the French posts already established to limit their operations to reconnaissances necessary for their security. In a reconnaissance at the beginning of September a French force was attacked by Berbers near Salah Metarfa, in the Delid region, and came away with the loss of 26 killed and wounded.

The regency of *Tunis* is under the nominal rule of the Bey Sidi Ali, born Oct. 5, 1817, and is nominally a vassal of Turkey. The French protectorate was established in 1882. The French Resident General, R. P. Millet, is Minister of Foreign Affairs, and of the 8 other ministers only 2 are Arabs. The French army of occupation is kept at a strength of about 600 officers and 16,000 men, and the gendarmery of 150 men is French, while the rural police is composed of natives. Tunis has an area of about 51,000 square miles and a population estimated at 1,500,000, mainly composed of Berbers and Bedouin Arabs. The ordinary revenue for 1898 was estimated at 24,061,100 francs, for 1899 at 24,733,100 francs, for 1900 at 26,089,300 francs; expenditure for 1898 at 24,060,525 francs, for 1899 at 24,731,053 francs, for 1900 at 25,988,215 francs. Of the revenue for 1900 direct taxes produced 7,944,400 francs according to the estimates, customs and other duties 8,791,700 francs, monopolies 7,182,300 francs, domains 1,273,400 francs, and

various sources 807,500 francs. Of the expenditures 11,780,445 francs were for finance and the expenses of the debt, 4,541,900 francs for public works, 3,615,110 francs for administration, 1,680,000 francs for the civil list, 1,346,515 francs for posts and telegraphs, 1,022,270 francs for agriculture and forestry, 1,011,500 francs for instruction, and 990,475 francs for the army and various other expenses. Arrears of revenue and of expenditure estimated at 1,992,500 francs are not included in the ordinary budget, nor 8,334,213 francs of exceptional expenditure raised by loan. The public debt of Tunis, consolidated in 1884 into a perpetual 3-per-cent. *rente* of 6,307,520 francs a year, was converted again into a 3½-per-cent. loan in 1888.

Agriculture is the main business of the country. Cereals are the chief product. There were 435,337 hectares of wheat in 1895, 433,978 hectares of barley, 8,069 hectares of vineyard, 12,000,000 olive trees producing 20,000,000 kilogrammes of oil, value 15,000,000 francs, and 1,350,000 date trees in the south, the export of dates being 1,000,000 francs a year. The number of horses in 1896 was 61,121; of asses and mules, 128,908; of cattle, 252,220; of sheep, 907,642; of goats, 612,621; of camels, 112,265. The fisheries, which are mainly followed by Italians, yielded 208,430 kilogrammes of sardines, 19,800 kilogrammes of anchovies, and 180,000 kilogrammes of sponges and sepia, in 1895. The total value of imports in 1898 was 62,744,681 francs, against 53,820,670 francs in 1897; exports, 52,214,651 francs, against 36,730,871 francs. The values of the principal imports in 1898 were 6,900,000 francs for cotton goods, 5,500,000 francs for groats, 5,000,000 francs for grain, 2,000,000 francs for flour, 1,700,000 francs for sugar, 1,700,000 francs for rails and metal goods, 1,600,000 francs for machines, 1,500,000 francs for woolen and silk goods, and 9,223,500 francs for precious metals. The values of the principal exports were 13,500,000 francs for wheat, 3,000,000 francs for olive oil, 3,000,000 francs for zinc ore, 2,000,000 francs for alfalfa, 1,500,000 francs for wine, and 1,500,000 francs for tan bark. The imports of precious metals were 9,223,500 francs, and exports 8,018,000 francs. The length of railroads is 883 miles, of which the Government owns 866 miles. There are 2,060 miles of telegraphs, with 3,670 miles of wire. The postal traffic in 1897 consisted of 3,084,539 internal and 9,732,873 foreign letters. The number of telegraph messages was 526,634. The number of vessels entered at Tunisian ports in 1898 was 9,377, of 2,221,805 tons. The merchant fleet belonging to Tunis consists of 403 vessels, all of small tonnage.

The convention signed on June 14, 1898, delimiting French and English possessions in the bend of the Niger, and the Anglo-French agreement of March, 1899, conceding to France the Sahara and the central Soudan westward to the Libyan desert and the Nile basin, remove nearly every possible ground for contention between France and England over their respective spheres of influence in northern Africa (see WEST AFRICA). In East Africa France has the colony of *Obok*, connected with which is the protectorate of *French Somaliland*. Since the port of Obok, first acquired in 1855, was occupied in 1881 French influence has been extended in that part of Somaliland and into Gallaland. The port of Jibutit was created in 1888 and made the seat of government. It has a population of 15,000, including 2,500 Europeans. A railroad to Harar has been partly constructed. The imports amount to 3,500,000 francs a year, and exports, chiefly coffee, wax, and ivory, to 1,300,000 francs. The inhabitants of this region are Danakils and Gallas. The local revenue in 1899 was estimated at 650,000 francs. The supplement-

tary expenditure of France for 1900 was fixed at 337,500 francs. The coast line is 125 miles and the inland boundary is undetermined. The population of the French colony is 22,370. In the north France claims the Bay of Adulis by virtue of a cession to Napoleon III by the King of Tigre.

Off the east coast of Africa numerous islands are colonies of France, some of which have been colonized for centuries. The claim to Madagascar itself was based on the exercise or assertion of sovereignty as early as 1642, but the country was not effectively occupied till 1895 (see MADAGASCAR). The island of *Réunion*, 420 miles east of Madagascar, has been a French possession since 1649, and is represented in the French Chambers by a Senator and two Deputies. The area is 965 square miles. The population in 1897 was 173,192. St. Denis, the capital, had 32,850 inhabitants in 1899. There are plantations of sugar cane, coffee, cacao, vanilla, and spices, on which coolie and native labor is employed. There were 15,219 British Indians, 4,496 natives of Madagascar, 9,848 Africans, and 836 Chinese in 1897. A railroad, 83 miles long, now belonging to the Government, connects the port of Pointe-des-Galets with the interior towns. The local revenue in 1899 was estimated at 5,979,077 francs. The expenditure of France for 1900 was 4,460,203 francs. The value of imports in 1898 was 19,765,268 francs, and of exports 19,027,857 francs, the export of sugar being 8,851,250 francs and vanilla 6,883,775 francs in value. The island of *Mayotte*, which has been French since 1843, and the *Comoro Islands*, first occupied in 1886, are administered from Réunion. Mayotte has an area of 140 square miles and 11,640 inhabitants. Sugar and rum are the chief products, but vanilla is becoming an important culture, and recently coffee has been planted extensively. The imports are about 440,000 francs and exports 960,000 francs. The local revenue in 1899 was 245,000 francs, to which France added 13,000 francs, and to repair the damages of a hurricane in February, 1898, a loan of 500,000 francs to be paid without interest in twenty years. The subvention from France in 1900 was 42,583 francs. The Comoros have an area of 620 square miles and a population of 47,000, mainly Mohammedan. Sugar and vanilla are cultivated, and coffee and clove trees have recently been planted. The revenue is about 260,000 francs. *St. Paul*, *Amsterdam*, and *Kerguelen* islands in the Indian Ocean have been annexed by France. *Nossi Bé* having an area of 130 square miles and 9,500 inhabitants, and producing sugar, coffee, rice, vanilla, and tobacco, has been attached administratively to Madagascar; also *Sainte Marie*, 64 square miles in extent, with 9,500 inhabitants.

In Asia the oldest French possessions are the towns of Pondichery, Karikal, Shandernagar, Mahé, and Yanam, with outlying districts covering an area of 196 square miles and having a total population of 279,091, including 1,000 Europeans. They form the colony of *French India*, all that remains of the once large possessions in the Indian peninsula. The colony sends a Senator and a Deputy to the National Assembly. The revenue for 1899 was estimated at 1,159,204 rupees. The French subvention for 1900 was 308,412 francs. The imports in 1898 were 3,877,710 francs; exports, mainly oil seeds, 14,836,736 francs.

The French conquests in Indo-China are modern, beginning with the protectorate over Cochin China, now a French colony, in 1861 and over Cambodia in 1862, though their origin goes back to an earlier colonial period when France was a dominant power in India and intervened in Annam in 1787. The protectorate over Annam was proclaimed in 1884

and established in 1886, and the conquest of Tonquin, which was annexed by proclamation as a dependency of Annam in 1884, was not accomplished without several years of fighting and two hard campaigns, in the last of which China became involved by the informal intervention of Chinese troops. In 1893, after an armed conflict with Siam, the protectorate was extended over Laos. *French Indo-China* is under the authority of a single governor general and forms a customs union, but the provinces have different forms of government and separate local authorities. The total area is about 363,000 square miles and the aggregate population is estimated at 23,300,000. The imports in 1898 were valued at 102,444,346 francs, of which 44,415,786 francs came from France. The exports of native produce were 125,553,528 francs in value, of which 29,198,786 francs went to France. The foreign exports were 1,957,665 francs in value, making the total exports 127,510,979 francs. The territory of Kwang-Chi-Wan, on the coast of China, acquired in 1899 by lease from the Chinese Government, has been placed under the authority of the Governor General of Indo-China. The Superior Council of Indo-China, created in 1887 and reorganized in 1897, is consulted by the Governor General and assists him in controlling the budgets of Cochin China, Annam, Tonquin, Cambodia, and Laos. The military force maintained by France in Indo-China numbers 9,059 men, recruited in Europe and paid by the French Government. The present Governor General is Paul Doumer. The revenue for 1899 was estimated at \$17,620,000; the contribution of France in 1900 was 19,222,288 francs.

Cochin China has an area of about 23,160 square miles, with a population estimated in 1899 at 2,323,499, comprising 4,451 Europeans, 2,054,831 Annamites, 183,659 Cambodians, 6,374 Mois, 2,656 Chams, 65,801 Chinese, 4,130 Malays, 1,477 Indians, 46 Tagals, and 46 other foreigners. A regiment of French marines is stationed in Cochin China and one in Tonquin and one in Annam. Besides there is the native soldiery trained by French officers, numbering in Cochin China 2,405. The main crop is rice, of which 11,277,770 piculs were exported in 1898 to China, Japan, and Europe. Other articles of export are cotton, silk, hides, fish, isinglass, pepper, cardamoms, and copra. The merchandise imports in 1898 were valued at 54,964,222 francs; exports, 108,010,322 francs. Coffee is raised by European and some native planters. The number of vessels entered in 1898 at the port of Saigon was 600, of 726,368 tons; cleared, 579, of 729,781 tons. The railroad from Saigon to Mytho is 51 miles long. The total length of telegraphs is 2,276, with 3,840 miles of wire, over which 321,536 messages were sent in 1896. There are 850 miles of railroad planned.

Annam has a King, Thanh Thai, who was set up by France in 1889, and the administration is carried on under French control by native officials. The area of the protectorate is 88,780 square miles; the population is estimated at 6,000,000. The products of the country are rice, silk, corn, areca nuts, cinnamon, tobacco, sugar, betel, manioc, bamboo, rubber, dyes, medicinal plants, and timber. The natives mine and work iron, copper, zinc, and gold, and make pottery and silk fabrics. The value of imports in 1898 was 3,775,000 francs; exports, 3,075,000 francs. The revenue in 1899 was estimated at \$1,845,835.

Cambodia is ruled by King Norodom under French direction. The area is 40,530 square miles; the population is estimated at 1,500,000, including besides the various native races 250,000 Chinese and Annamites and 40,000 Malays. Phnom Penh,

the capital, has about 50,000 inhabitants. The revenue for 1899 was estimated at \$1,997,000, out of which the King receives \$415,200 to maintain his court. The products of the country are rice, cotton, betel, tobacco, indigo, sugar, silk, pepper, cinnamon, and coffee. Fish are exported, as well as cotton and cotton seed, rice, and tobacco.

Tonquin is governed by the French Resident, the former Viceroy having been removed in 1897. The area is 119,660 square miles. The population is estimated at 12,000,000. Hanoi, the capital, has about 150,000 inhabitants. The force of native troops, officered by Frenchmen, is 14,916. The exports in 1898 were valued at 43,675,000 francs, of which 20,425,000 were French imports; exports, valued at 425,000 francs. The foreign goods sent through Yunnan were valued at 5,000,000 francs and the turn traffic at 3,200,000 francs for shipment by road. Tonquin is an important producer of rice, and the bulk of the crop is shipped to Hong-Kong for the Chinese market. Other products are sugar, pepper, cotton, oil seeds, tropical fruits, tobacco, and coffee, which has been planted by Europeans. French companies operate the coal mines, the product of which is about 200,000 tons a year. The tonnage of 1,407 vessels entered in 1896 was 1,454. The railroad from Phulang to Langson, 100 miles, is to be extended to Nacham, and thence to Yunnan, where French engineers were at work when the anti-foreign disturbances in China caused temporary interruption. The local revenue in 1899 was estimated at \$3,993,638; the contribution from the French treasury was 390,000 francs.

Laos has an estimated area of 91,000 square miles and 1,500,000 population. The country produces rice, cotton, and tobacco, and contains large deposits of teak. French companies have concessions to work gold, tin, and lead mines and to dig precious stones. The budget for 1900, defrayed by the other provinces of Indo-China, was \$692,431.

The French possessions in the Pacific comprise New Caledonia and its dependencies and the Society Islands and groups and islands of lesser importance in Oceania. New Caledonia, which has been the principal penal colony of France, has an area of about 6,900 square miles, nearly half of which is mountainous and unproductive, and half the remainder pasture land and forest. The European population in 1898 comprised 5,585 colonists, 1,622 officials, 1,714 soldiers, 2,515 freed convicts, and 7,477 convicts in the penal settlement, which occupies 400 square miles. The total number of Europeans was 19,053; Asiatics, 1,820; natives, 1,874; total population, 52,756. The products of agriculture include coffee, corn, tobacco, sugar, manioc, grapes, and pineapples. Convicts are employed in agriculture, and also Kanakas and natives of the New Hebrides. The minerals produced in 1897 consisted of 27,464 tons of nickel, 3,200 tons of cobalt ore, 3,949 tons of chrome, 2,200 tons of copper ore, and 25 tons of gold ore. The exports of mineral produce in 1898 were valued at 4,261,353 francs. The total imports were 9,752,806 francs in value, of which 5,026,928 francs were French; total exports, 6,736,720 francs, of which France took 1,977,767 francs. There were 137 vessels entered at Noumea in 1898, of 119,889 tons, and 138, of 1,105 tons, were cleared. The local revenue in 1899 was 3,180,050 francs; expenditure of France in 1900, including 3,638,100 francs for the penal establishment, 6,643,748 francs. Attached to New Caledonia is the Isle of Pines, having an area of 558 square miles and a population of 600, besides a convict settlement composed of habitual criminals from France. The Wallis Islands, with an area of 58 square miles and about 4,500 natives,

were occupied in 1887, while New Caledonia has been French territory since 1854. The Loyalty Islands, having an area of 800 square miles and 14,800 inhabitants, export sandalwood and produce bananas for food and export. Fatuna and Alaï, with a population of about 1,500, were occupied in 1888. The Huon Islands have also been annexed. The New Hebrides are controlled jointly by France and England under the convention of Oct. 29, 1887.

The French possessions in Oceania comprise the Society Islands, chief of which are Tahiti and Moorea; the Windward Islands, comprising Raiatea, Taboa, and Bora Bora; the Tubai and Ravavae groups; the Tuamotu Islands, the Gambier Islands, the island of Rapa, and the Marquesas Islands. They have an aggregate area of 1,520 square miles and about 29,000 inhabitants. Tahiti, which produces copra, sugar, rum, and vanilla, and also coffee, cotton, and tobacco, though not so much as formerly, imported 2,933,800 francs' worth of merchandise in 1898, and exported 2,594,975 francs' worth. Of the imports 1,290,300 francs came from the United States, which took 982,025 francs of exports. The number of vessels entered at Papeete in 1898 was 314, of 38,572 tons; cleared, 328, of 38,722 tons. The local revenue in 1899 was 1,146,547 francs; the contribution of France in 1900 was 852,383 francs. Moorea has an area of 50 square miles and 1,557 inhabitants. The population of Raiatea and Taboa is about 2,300; of Huahine, 1,300; of Bora Bora, 800. The area of the Tubuai and Ravavae islands is about 100 square miles, their population 2,300. Rapa, only 15 square miles in extent, has 192 inhabitants. In the Tuamotu Islands are about 7,000 natives. The Gambier group contains 400 inhabitants on an area of 6 square miles. The area of the Marquesas group is 480 square miles, with a population of 5,240 natives, who gather copra for export.

In America, all that remains of the once great colonial dominions of France are the petty islands of St. Pierre and Miquelon, retained as a fishing station near the banks of Newfoundland; the West Indian islands of Martinique and Guadeloupe (see WEST INDIES), and French Guiana. St. Pierre and Miquelon have 10 and 83 square miles of area respectively, and the former 5,700 the latter 550 permanent inhabitants. There were 18,500 tons of fish caught in 1897, and the exports of dried fish were valued at 24,700,000 francs; fish oil, 1,030,000 francs. The local revenue in 1899 was 519,865 francs; the contribution of France in 1900 was 282,938 francs.

French Guiana had a Governor, L. Mouttet, in 1900, who was assisted by a Council of 16 members. The colony sends a Deputy to the French Chamber. The area is 46,850 square miles, not including the territory disputed with the republic of Brazil. The population is estimated at 30,300, not including 1,500 aborigines but including 3,900 convicts and 1,800 on ticket of leave. The capital and seaport, Cayenne, has 12,300 inhabitants. Rice, corn, manioc, cacao, coffee, sugar, indigo, and tobacco are raised, but not in considerable quantity, the area under cultivation not being above 8,000 acres. Gold mining is now the chief industry. The export of gold in 1897 was 74,646 ounces; in 1898, 48,600 ounces; in 1899, 81,715 ounces. Silver, iron, and phosphates are also obtained. Other exports are rum, coffee, cacao, and cabinet woods. The total value of imports in 1897 was 9,334,000 francs; of exports, 7,160,000 francs. The number of vessels that visited Cayenne was 40, of 17,290 tons. The revenue in 1899 was estimated at 3,027,750 francs, exclusive of the contribution from France, which in 1900 was 6,899,061

francs, of which 5,450,550 francs were for the support of the penal colony of Cayenne. This was started in 1885, and is composed of habitual criminals and convicts sentenced for more than eight years. The tract between the Araguay and the Oyapuk rivers, containing rich gold fields discovered in recent years, was in dispute between Brazil and France, which claimed that the river Vincent Pinzon, defined as the boundary in the original treaty, was identical with the Araguay. In the beginning France laid claim to the whole region between the Amazon, the Rio Branco, and the Atlantic Ocean. After negotiations lasting fourteen years, during which various arrangements were made that failed to receive the ratification of one party or the other, a treaty was made in 1897 leaving the whole dispute to be arbitrated by the President of the Swiss Confederation, who rendered his decision on Dec. 1, 1900. The award gives to Brazil 147,000 square miles of the disputed territory and only 3,000 square miles to France, consisting of a strip north of the Tumuc Humac mountains. The boundary follows the Thalgweg of the Oyapuk river from its mouth up to its source and from there to the boundary of Dutch Guiana, the water parting in the Tumuc Humac range.

Political Events.—The session of the Chambers began on Jan. 9. Paul Déroulède, André Buffet, M. Guérin, and Comte de Lur-Saluces, the chiefs of the Nationalist, Anti-Semite, and royalist plotters of revolt, having been banished and the lesser ones acquitted, the Government proposed to efface all traces of the discord and bitterness engendered by the Dreyfus affair by a general amnesty. This was not acceptable to Émile Zola nor to ex-Col. Picquart, the champions of Dreyfus, who were still under indictment, nor would it stop the suit for slander brought by Mme. Henry against Joseph Reinach, and similar actions.

In the triennial elections for the renewal of one third of the Senate the Nationalist candidates were not successful except in the old strongholds of Clerical and royalist opinion. Gen. Mercier was elected in one of these, the department of the Loire Inférieure. His success was due to a newspaper in which a religious association, the Assumptionist Fathers, assailed the Government with extravagant abuse. The Government suppressed this confraternity by judicial process as an unauthorized association. The Paris newspaper published by these ecclesiastical politicians, who were in receipt of enormous pecuniary contributions for the support of their agitation against the existing form of government, was called *La Croix*, and its daily circulation was 250,000, while its articles were reprinted in 50 provincial sheets published for that purpose by the same society. The recrudescence of clerical agitation for the overthrow of the republic provoked the Republicans to fresh anti-clerical legislation. The Government brought in an educational bill requiring three years of preliminary study in a state school as a condition of appointment to any public office or of admittance to any one of the special schools of the state. The bill was intended to extinguish the remaining Catholic higher schools, and another measure was proposed forbidding religious organizations to establish primary or secondary schools. The supporters of these measures justified them by asserting that Catholic schools encouraged and propagated a reactionary spirit hostile to the republic.

Many of the clergy attacked the Government bitterly in consequence of the condemnation of the Assumptionist Fathers. Archbishop Gouthe-Souillard, of the diocese of Aix, assailed the Premier in

terms which it was impossible to ignore, and yet it was inexpedient to apply the too rigorous remedy of the penal code, which punishes offenses of this sort with banishment. The occasion suggested to M. Waldeck-Rousseau an amendment to the code, substituting the milder and more practicable penalty of imprisonment for terms ranging from three months to two years for criticism of Government measures introduced into pastoral letters, and for criticism of acts of the supreme authority contained in a speech or sermon or published in the press the term of from two weeks to six months. The minister took the familiar ground that ecclesiastics who are functionaries and stipendiaries of the state are bound to observe an attitude of respect toward the Government. Cardinal Richard, Archbishop of Paris, published letters in *La Croix* condemning the suppression of the Assumptionists. The Government, out of regard for his great age, took no action in his case, but suspended the stipends of other bishops who joined in the attacks, refraining, however, from the application of the press law, which the bishops sought to provoke the ministry to put in force and which would be more incontestably legal than the suspension of stipends, though the latter course has the sanction of precedents going back for a long period.

M. Méline failed in an attempt to upset the Cabinet based on its Radical measures against Clericalism and the presence of a Socialist, M. Millerand. The fickle Parisian populace, which of late years has given Socialist majorities, now turned against the Government containing a representative of the Socialists, which the departments had indorsed in the senatorial elections and which held together its majority in the Chamber. In the municipal elections, which took place in May, Paris elected 32 Nationalists and 8 Monarchists to the municipal council. Algiers elected Anti-Semites. Most of the French municipalities elected Republicans, and the ministers asserted that they were generally in harmony with the Government, and a large proportion of the Opposition majority in the Paris council were Republicans, though opposed to the Government. The Chamber by 286 votes to 237 approved the ministerial declaration of a continued policy of Republican reforms and defense of the secular state. The universal exposition necessitated political quiet and a truce to party rancor. The ministerial programme, besides the education bill, included a bill on associations, an income tax, and a revision of the death duties. M. Waldeck-Rousseau proposed a new libel law. The Socialist party was generally hostile to the presence of a Socialist in a *bourgeois* ministry, and its general committee drew up a protest against the action of the Socialist Deputies when these supported the Cabinet against an interpellation of the Nationalists reflecting on the violent repression of strikers at Chalons.

On May 29 Gen. Gallifet, who was in poor health, resigned his portfolio as Minister of War, and Gen. André was appointed to succeed him. His retirement was not due to differences with his colleagues, but to the attacks of the Nationalists, who charged the ministers with trying to reopen the Dreyfus case, and who were joined by M. Méline and his section of the Republicans, while M. Bourgeois with his band of Radicals came to the rescue of the ministry with a motion expressing confidence in the Government and in the devotion of the army to the republic. Gen. André's entrance into the Cabinet was followed by the resignation of the commander in chief of the army, Gen. Jamont, who protested against changing the chief of the general staff. Gen. Brugère succeeded

him as generalissimo and Gen. Pendezec was appointed head of the general staff. The difficulty arose from the opposition of Gen. Delanne, the head of the staff, who was removed, to Gen. André's act in changing some of the heads of bureaux. The amnesty bill of the Government was violently opposed by the Dreyfusards as well as by the anti-Semites. It proposed to extinguish all pending prosecutions, including the impeachment of Gen. Mercier, ex-Minister of War, but not to restore Dreyfus to his civil rights. The vote on the bill was postponed till the winter session. The navy bill and projects for colonial defense compelled the Government to devise ways and means for increasing the revenue. Not even the Nationalists would raise a cry against increased taxation for such purposes. A credit of 61,000,000 francs was voted for gunboats and other means of colonial defense, and the organization of a colonial army was approved. The parties applauded with one mind the operations in the Sahara and the course of M. Pichon, the French minister at Peking, in the Chinese difficulty. The requirements of the Government were 58,000,000 francs more than in the last budget, 20,000,000 francs of this being for coast defense. An increased yield of the existing taxes was expected to amount to 35,000,000 francs, and the readjusted death duties and new taxes were counted on to produce the remainder. A reduction of the national debt to the extent of 1,000,000 francs accruing from the repayment of war loans was a feature of the budget of M. Maillaux. The naval programme involved the expenditure of between 150,000,000 and 200,000,000 francs a year, including the cost of coast defenses. The abolition of the *octroi* duties by the towns is a fiscal reform that has been contemplated for a long time. This tax on articles of consumption collected at the gates of the large towns produces about 330,000,000 francs a year throughout France. It is a tax unsuited to modern methods of living, utterly to collect, inconvenient, and obstructive to trade, causing a loss to the community much greater than the net receipts of the towns from its source. The first large town to do away with it is Dijon. The Chamber agreed to the proposal to the municipality to supersede the duty by increasing the taxes on houses, wine shops, horses and carriages, and dogs. The Chamber agreed to bill exempting school-teachers from their annual period of drill in the reserves, and resolved that reservists be released from this service for the year in order to facilitate visits to the exhibition, but did not carry the resolution into effect because the authorities insisted that a special law would be necessary.

The new direct taxes proposed in the budget were carried through by a great majority. The income tax act is expected to double the amount hitherto paid by the average citizen. Foreigners residing in France are taxed equally with Frenchmen. The amount of income received by the individual is roughly computed by multiplying by 5 the amount that he pays for rent, and on his income he pays a tax of 4 per cent. The session was closed on July 10.

The Chambers met again on Nov. 6. A deficit instead of the contemplated surplus for the year was the forecast of the Budget Committee. The legislation proposed by the Premier included the modeling of the duties on strong drink in connection with the prospective reduction at the beginning of 1901 of the *octroi* duties on hygienic beverages, such as wine and cider; a bill on associations, by which the Government hoped to put an end to an increasing peril and prevent the creation of an influence that no state could tolerate;

the creation of workmen's pensions, and measures on the education of state officials, courts-martial, trade unions, and the income tax. With regard to strikes, the bill of 1892 provided for optional arbitration, compulsory arbitration having been objected to as an infringement of the right to strike and also as an unwarranted extension of the powers of the state, even though the enforced arrangement should be more reasonable than one that the masters and men might make among themselves. The results of the law of 1892 had been considerable, and recent prolonged strikes had been settled by arbitration, though not by justices of the peace, the official arbitrators. The Government did not consider the state entitled to dictate to individuals how they should regulate their factories or settle their disputes, but it was desirable that the free working of arrangements between employers and employed should lead to something better than the present situation; to this end it was proposed to introduce a clause into labor contracts which would make arbitration obligatory upon the parties after they had freely entered into such contracts.

A bill was introduced into the Senate by M. Piot imposing a tax on unmarried men and women above thirty years of age and on couples married for five years and having no offspring, while rewarding families of more than 4 children out of an annual credit of 20,000,000 francs. The religious associations, which the Government decided to place under stricter regulations because by ingenious evasion of the existing law or owing to its lax administration they had reached a position in which a serious peril to the state was discerned, hold in mortmain property valued at 1,000,000,000 francs and personal property estimated at a higher figure. This great wealth has been employed for political as well as for religious purposes, and the political aims followed by the religious orders are subversive of the republican state. M. Waldeck-Rousseau declared that the religious orders, dispersed but not suppressed, have covered France with their operations, usurping the functions of the secular clergy, acquiring control of the seminaries, and defying the authority of the bishops. The bill on education, supplementing the measure dealing with religious associations, requires those who wish to enter the civil service or the army to receive their education in the secular state institutions, since under present conditions half the youth of France are educated in such a way as to become practical strangers to the other half, and in clerical institutions become involved with ideas fundamentally hostile to the republic.

A debate on its general policy resulted in a majority for the Government of 330 to 238, a greater one than it commanded in the previous session. The bill on strikes, presented by M. Millebrand, provides that in every factory employing 50 or more men a printed notice shall state whether or not arbitration is one of the conditions of employment. All state contracts will require it to be. If it is a condition in private employment, the men are to elect delegates, who will submit any complaints or demands to the employer, and, failing an agreement, both sides may nominate arbitrators. In case the employer refuses to do so, the men may resolve to strike by secret ballot, but the majority must comprise at least one third of the persons employed, and there must also be a weekly vote to decide on the continuance of the strike or its cessation. A previous measure decreed in September provided for the creation of labor councils composed equally of employers and workmen nominated by their trade unions or syndicates. These bodies will inform the Government

of the conditions of labor, influence the relations between labor and capital, and appoint conciliators or arbitrators in the case of strikes. The amnesty bill was passed without the inclusion of M. Déroulède and his fellow-exiles or of the Assumptionist monks.

FRIENDS. Friends in America.—Besides the regular sessions of the yearly meetings, conferences of American Friends to consider special questions were held in Philadelphia in 1829 and in Baltimore in 1849. The first general conference of the yearly meetings was held in Richmond, Ind., in 1887, and was attended by delegates from London and Dublin yearly meetings, and from all the yearly meetings on the American continent except that of Philadelphia, which was unofficially represented. It was afterward decided to hold similar conferences of the American yearly meetings once in five years. Such conferences have been held at Indianapolis, Ind., in 1892 and 1897. At the conference of 1897 it was felt that a closer union of the yearly meetings and a uniform discipline would be desirable. A committee was appointed in furtherance of this purpose, which prepared a draft of a constitution and discipline and published them in May, 1900, for the information and consideration of the yearly meetings. No change was proposed in the new constitution in the organization or principles of government of the society, or in methods of transacting business. The democratic principle was sought to be maintained by continuing the chief legislative, judicial, and executive authority in the yearly and monthly meetings, in the proceedings of which every member has a right to participate. The brief article on belief was intended as a general statement, and was thought to be all that was now necessary, since the "Richmond declaration" had been so recently prepared and had met with general acceptance. The preparative meeting was discontinued, its business being referred to the monthly meeting. The five years' meeting, adopting the idea of the quinquennial conference into the Quaker system, was designed to be a practical working body, without legislative authority. In it the smaller yearly meetings were given a larger representation than in actual proportion to their numerical strength. The article on belief declares that "the vital principle of the Christian faith is the truth that man's salvation and higher life are personal matters between the individual soul and God. Salvation is deliverance from sin and the possession of the spiritual life. This comes through a personal faith in Jesus Christ as the Saviour, who, through his love and sacrifice, draws us to him. Conviction for sin is awakened by the operation of the Holy Spirit causing the soul to feel its need of reconciliation with God. When Christ is seen as the only hope of salvation, and a man yields to him, he is brought into newness of life, and realizes that his sonship to God has become an actual reality. This transformation is wrought without the necessary agency of any human priest or ordinance or ceremony whatever. A changed nature and life bear witness to this new relation to him.

"The whole spiritual life grows out of the soul's relation to God and its co-operation with him, not from any outward or traditional observance. Christ himself baptizes the surrendered soul with the Holy Spirit, enduing it with power, bestowing gifts for service. This is an efficient baptism, a direct incoming of divine power for the transformation and control of the whole man. Christ himself is the spiritual bread which nourishes the soul, and he thus enters into and becomes a part of the being of those who partake of him. This

participation of Christ and apprehension of him become the goal of life for the Christian. Those who thus enter into oneness with him become also joined in living union with each other as members of one body. Both worship and Christian fellowship spring out of this immediate relation of believing souls with their Lord.

"The Holy Scriptures were given by inspiration of God and are the divinely authorized record of the doctrines which Christians are bound to accept, and of the moral principles which are to regulate their lives and actions. In them, as interpreted and unfolded by the Holy Spirit, is an ever fresh and unfailing source of spiritual truth for the proper guidance of life and practice.

"The doctrines of the apostolic days are held by the Friends as essentials of Christianity. The Fatherhood of God, the Deity and humanity of the Son, the gift of the Holy Spirit, the atonement through Jesus Christ by which men are reconciled to God, the resurrection, the high priesthood of Christ, and the individual priesthood of believers, are most precious truths to be held, not as traditional dogmas, but as vital, life-giving realities. The sinful condition of man and his proneness to yield to temptation, the world's absolute need of a Saviour, and the cleansing from sin in forgiveness and sanctification through the blood of Jesus Christ, are unceasing incentives to all who believe to become laborers together with God in extending his kingdom. By this high calling the Friends are pledged to the proclamation of the truth wherever the Spirit leads, both in home and in foreign fields.

"The indwelling Spirit guides and controls the surrendered life, and the Christian's constant and supreme business is obedience to him. But, while the importance of individual guidance and obedience is thus emphasized, this fact gives no ground for license; the sanctified conclusions of the Church are above the judgment of a single individual.

"The Friends find no scriptural evidence or authority for any form or degree of sacerdotalism in the Christian Church, or for the establishment of any ordinance or ceremonial rite for perpetual observance. The teachings of Jesus Christ concerning the spiritual nature of religion, the impossibility of promoting the spiritual life by the ceremonial application of material things, the fact that faith in Jesus Christ himself is all-sufficient, the purpose of his life, death, resurrection, and ascension, and his presence in the believer's heart, virtually destroy every ceremonial system and point the soul to the only satisfying source of spiritual life and power.

"With faith in the wisdom of Almighty God, the Father, the Son, and the Holy Spirit, and believing that it is his purpose to make his Church on earth a power for righteousness and truth, the Friends labor for the alleviation of human suffering; for the intellectual, moral, and spiritual elevation of mankind; and for purified and exalted citizenship. The Friends believe war to be incompatible with Christianity, and seek to promote peaceful methods for the settlement of all differences between nations and between men.

"It is an essential part of the faith that a man should be in truth what he professes in word, and the underlying principle of life and action for individuals, and also for society, is transformation through the power of God and implicit obedience to his revealed will.

"For more explicit and extended statements of belief, reference is made to those officially put forth at various times, especially to the letter of George Fox to the Governor of Barbadoes in 1671,

and to the Declaration of Faith, issued by the Richmond Conference of 1887."

The constitution is to become operative upon those adopting it when it shall have been approved and adopted by seven yearly meetings.

The missionaries of the American Friends are supported by yearly meetings or by associations generally interested in the care of one or more districts. Sixty missionaries are thus sustained in stations at Ramlah, Syria, Nanking (China), Tokio (Japan), Newgong (Bundelcund, India), Jamaica, Victoria, Matamoras, Metahuala, Cedral, and Estación de Catorce, Mexico; Douglas, Kotzebue, and Kake Island, Alaska.

The American Friends' Board of Foreign Missions at its meeting in February, 1900, made arrangements for securing an incorporation under the laws of the State of Indiana, and completed an organization for work in the field. At the same time it decided to open a mission in Cuba, and appointed an agent or superintendent to go out as early as possible and start the work.

The Friends' African Industrial Mission was organized early in the year to found an industrial mission settlement on the eastern shore of the Victoria Nyanza. It contemplates obtaining by lease from the British Government and purchase from the natives a tract of land on the high and therefore healthy plateau, where the most profitable crops of the region may be cultivated and their industries pursued for the products of which good markets are not far distant; and it is the purpose of the mission to become self-supporting as soon as possible. The several hundred native workmen needed to do the manual labor of the settlement will be required to live on the station, where they will be withdrawn from heathen surroundings and kept continuously under Christian influence. Boys in school will be taught various handicrafts, such as blacksmithing, carpenter's work, and shoemaking, and the girls household duties. Daily gospel services will be one of the features of the life of the settlement. The board controlling the mission is to be composed of two friends from each yearly meeting.

Several yearly meetings have already engaged heartily in the work, and a large number of qualified workers have applied for service without any appeal having been made.

British Friends.—The summary of numbers for the year 1899 supplied to the London Yearly Meeting shows a membership in Great Britain of 17,153, being an increase of 121 on the number reported in the previous year; these were comprised in 76 congregations, 4 more than in 1898. Other numbers were 8,000 habitual attenders at the congregational meetings, 380 persons admitted to the society during the year "on conviction," and 145 retired, 145 births, and 256 deaths. The disparity in the number of births and of deaths is explained partly by reference to the relatively large number of persons who join the society in mature life, causing additions to the death rate not balanced by corresponding additions to the birth rate, and partly by failure to enter the names of children of mixed marriages or marriages between Friends and non-Friends.

A chief subject of discussion at the meeting on ministry and oversight of the London Yearly Meeting in May was the eldership. The meeting had in 1898 adopted a minute on worship and ministry in which what were regarded as the true conditions of living worship and of enlightened and effective ministry were set forth. Now it discussed and adopted a minute to be sent down to the monthly meetings, pointing out the nature of the duties involved in eldership and the

qualifications which should be regarded in appointing persons to that office. In the Yearly Meeting at Large a committee was appointed to prepare a statement of the real position of the society in regard to war, and an appeal was directed to be made to the Government asking that, in deciding upon a settlement of the conflict in South Africa, the Christian sentiment of the country and the desire for justice and magnanimity should have due weight. The minute prepared by this committee and adopted by the meeting took the following form: "This meeting has felt profound sorrow on account of the war in South Africa, with its mournful sacrifice of brave lives, its many stricken and darkened homes, and its manifold sequel of misery and bitterness. It can not but also grieve over the discredit brought upon the religion of Jesus Christ by warfare between those who name his name and seek him as their Saviour and example. It respectfully appeals to the Government of these realms to do all that can be done to allay mistrust and to remove misunderstandings, which ever inflame and embitter strife, and are among the most fruitful causes of war and of its continuance. It earnestly desires and prays for the establishment of an early and durable peace in South Africa, which shall enable all elements of the population, including the native races, to grow together side by side under free institutions, and shall rest not upon the Government of the sword or the humiliation of the vanquished, but upon the lasting foundations of justice and good will." The subject of "birthright membership" was brought up in a minute from the Bedfordshire quarterly meeting, in which it was pointed out that the principle of "hereditary religion" is contrary to the teaching of the New Testament; that there should be a sharp distinction between the natural birth and spiritual birth; that only about 40 per cent. of the membership of the society is through birthright, and that it is not fair to those who come into it by request to maintain two kinds of membership. The minute proposed, therefore, that children should henceforth be enrolled as associates, with all the privileges now enjoyed by birthright members, except that they should not be members of meetings for business until they apply for full membership. Arguments were urged in the yearly meeting against the change proposed, that heredity was of great value in religious associations; that there was danger that the inducements offered by other churches and social attractions would draw away many of the young people if their close, organic connection with the society was broken during these early formative years; and that the proposed new plan might result in introducing "tests" for membership—that is, that young people would be received only after a careful examination of their faith. The fact was emphasized that the very condition of entering the kingdom of heaven, as laid down by Christ, is to "become as little children," and that the apostle Paul clearly regarded children as a real part of the Church. One of the principal points urged in favor of the change was that the true Quaker is, alone, the person who has experienced the regenerating power of the Holy Spirit. The contemplated new discipline of American Friends provides that the children of members be enrolled as associate members. "They are thus recognized, not because their birthright can of itself make them members of the body of Christ, for they can only become such by experiencing the new birth by the Holy Spirit, but because of the promises in the Holy Scriptures to believers and their households, and the conviction that true Christians will so make

their children the objects of living prayer, and will so instruct them in the Gospel and go with them to the throne of grace, that they will surrender their hearts to God in their youth, and early take a natural and living interest in the Church as they do in the family. Persons thus enrolled as associate members shall be enrolled as active members of the Church when they shall have made a credible profession of faith in Jesus Christ as their Saviour and Lord, and shall have accepted the doctrines of the Gospel as held by the Friends. If the member does not make such

profession when he reaches matured years, his name may be dropped from the list of members at the discretion of the monthly meeting. When but one parent is a member, the children may be enrolled as associate members upon the request of that parent and the consent of the other. Other minutes of quarterly meetings were presented adverse to any modification of the rules. After discussion, a minute was drawn in the yearly meeting stating that it was not prepared at present to make any change.

G

GEORGIA, a Southern State, one of the original thirteen, ratified the Constitution Jan. 2, 1788; area, 59,475 square miles. The population, according to each decennial census, was 82,548 in 1790; 162,686 in 1800; 252,433 in 1810; 340,985 in 1820; 516,823 in 1830; 691,392 in 1840; 906,185 in 1850; 1,057,286 in 1860; 1,184,109 in 1870; 1,542,180 in 1880; 1,837,353 in 1890; and 2,216,331 in 1900. Capital, Atlanta.

Government.—The following were the State officers in 1900: Governor, Allen D. Candler; Secretary of State, Philip Cook; Treasurer, W. J. Speer; Comptroller, William A. Wright; Attorney-General, Joseph M. Terrell; State School Commissioner, G. R. Glenn; Adjutant General, J. M. Kell; Commissioner of Agriculture, O. B. Stevens; Geologist, W. S. Yeates; Chemist, J. M. McCandless; Librarian, James E. Brown; Railroad Commissioners, L. N. Trammell, S. R. Atkinson, T. C. Crenshaw; Prison Commissioners, J. S. Turner, C. A. Evans, T. Eason; Chief Justice of the Supreme Court, Thomas J. Simmons; Associate Justices, Samuel Lumpkin, Henry T. Lewis, Andrew J. Cobb, William A. Little, and William H. Fish; Clerk, Z. D. Harrison—all Democrats.

Finances.—The Treasurer's report for the year ending Sept. 30, 1900, contains these items: Balance in the treasury, Oct. 1, 1899, \$438,776.66; received after that date, \$3,542,069.69; making a total of \$3,980,846.35. The disbursements for the same period, Oct. 1 to Sept. 30, 1900, were \$3,564,700.05; leaving a balance in the treasury, Oct. 1, of \$416,146.30. This balance was composed of advances on civic establishment coupons paid, etc., amounting to \$38,217.01, and \$377,929.29 belonging to the reserved fund. The gain in values in 1900 over 1899, including every form of property, was \$18,788,333. Of this amount \$3,489,206 is in the railroads of the State and \$15,299,127 is in county property. The taxable property was valued at \$436,000,000.

Appropriations.—The appropriations for the year were: Special appropriations, \$9,794.41; State University, 1900, \$8,000; State Normal School—1899, \$4,000; 1900, \$12,000; trustees Sanatorium—1899, \$1,197.90; 1900, \$642.16; trustees State University, \$545.86; temporary loan, \$100,000; widows' pensions—1899, \$420; 1900, \$213,300; Western and Atlantic Railroad change bills, \$3; total, \$3,564,700.05.

Education.—The Superintendent of Education says, in his report for 1900: "All the States in the Union except a small group of Southern States now have a nine months' absolutely free term for all the children of school age. Georgia has only a five months' term. Massachusetts spends \$39.10 every year for each child enrolled, Rhode Island spends \$36.26, New York \$34.55, while Georgia spends \$6.31. As a matter of fact, Georgia spends

on her country children each year less than \$ for each child enrolled. Georgia provides for each child of school age \$2.16, while Massachusetts provides \$22.16, Rhode Island \$14.62, New York \$16.95. Nearly all the Middle and Western States spend ten times as much per child of school age as Georgia spends. The teachers in these systems receive three and four times as much salary as our teachers receive. . . . If you have taken the trouble to ascertain the present value of the courthouse and jail in your county and the present value of all the schoolhouses in your county, you have learned, perhaps, that your courthouse and jail have cost the county three or four times as much as all the schoolhouses in the county have cost. . . . The tables in this report will show that the average pay of the country school-teacher in Georgia for the last school year was \$128 per annum.

"In 1898, the date of the last school census the school population was 660,870. This report shows an enrollment for the school year 1899 of 423,467, with a total average attendance of only 253,193. This enrollment and attendance show a percentage of increase over former years, and yet less than 40 per cent. of our children of school age attended school for the entire school term.

"Fulton County [Atlanta is in this county] spending this year on her prisoners \$82,050.45. The county's budget there is not a dollar for schools. The State gives the county \$13,747.71. The average number of prisoners in Fulton County is supposed to be about 2,000. The school children of the county by the last census numbered 6,850. Here are 6,850 children at school at a cost of \$13,747.71, and 2,000 prisoners in prisons or the chain gang at a cost of \$82,050.45."

Mr. E. C. Branson, president of the State Normal School, says in an article on Education and Crime: "One sixth of our whites and nearly seven tenths of the negroes are illiterate, according to the census of 1890; and we find that 44 per cent. of our penitentiary convicts were committed to the State for crimes of passion and violence, while 35 per cent. were committed for burglary alone. Georgia is near the bottom in the column of illiteracy, only four States having a lower rate, and persons of property are exposed accordingly.

"Taking the illiteracy returns for Georgia in 1893 and the figures in our penitentiary report nearest that date, we find that an illiterate negro population of 27 per cent. furnished 54 per cent. of the negro convicts; while a literate negro population of 73 per cent. furnished 46 per cent. of the negro convicts. Thus the illiterate negro population of the State averaged 3 convicts per 100, while the literate negro population of the State averaged 1."

The school fund for 1900 was \$1,440,642.

The Governor, in his annual message, said: "

schools for the higher education of the negroes, supported by churches and other organizations, are richer than those for the higher education of whites. The value of the property of the negro schools of Atlanta alone, it is said, is greater than all the endowments of all the schools and colleges in the State for the education of the whites."

Prisons.—The State Prison Commission has abolished the county camp of Coffee County, where inhuman treatment was shown to have been exercised. With this removal, the last camp under the old convict lease system disappears.

Banks.—The annual report of the State banks shows that there has been no failure among them, while there has been an increase of \$2,305,000 in loans and \$1,824,000 in deposits. The report has the following:

ITEMS.	Sept. 5, 1899.	Sept. 5, 1900.
Resources:		
Loans.....	\$26,448,855.81	\$27,753,942.79
Overdrafts.....	615,353.00	600,732.85
Bonds and stocks.....	2,340,801.52	2,408,282.46
Real estate, etc.....	1,825,218.99	1,709,769.93
Due from banks and bankers.....	4,091,708.80	3,648,196.76
Cash on hand.....	3,841,088.76	2,694,977.85
Items other than above.....	84,629.22	118,746.39
Total.....	\$37,250,651.20	\$38,929,686.08
Liabilities:		
Capital paid in.....	9,240,828.00	735,827.50
Surplus and net profits.....	2,789,294.15	3,145,564.10
Due to banks and bankers.....	1,055,111.05	1,055,625.34
Due unpaid dividends.....	12,597.43	17,208.01
Due depositors.....	21,150,309.15	22,009,084.14
Rediscunts.....	827,747.85	1,189,006.18
Bills payable.....	2,169,837.94	2,777,894.81
Items other than above.....	4,955.63	
Total.....	\$37,250,651.20	\$38,929,686.08

Products.—The official statement, Sept. 1, 1900, gives 1,309,000 bales as Georgia's cotton crop for the year. It was late in maturing, and fell somewhat below that figure.

In 1899 an effort was made to diversify the industries of the State, with some success. The following is the estimate made in May, 1900, of the fruit industry in and near Floyd County: peach trees, 600,000; apple trees, 100,000; pear trees, 25,000. These trees will produce in a good year 1,000,000 crates of peaches, 300,000 crates of apples, 25,000 crates of pears, which will load 1,000 cars of peaches, 150 cars of apples, 15 cars of pears. This list does not include Japanese pums and grapes. There are magnificent vineyards, and it is probable that 10,000 gallons of wine are made yearly. One grape grower experimented last year on producing clarets, and had wonderful success.

The La Grange Creamery received a medal for butter exhibited at the Paris Exposition. The company is four years old, and is doing a profitable business. The sugar-cane crop of the State was the largest ever raised, and the Williams Manufacturing Company report a good demand for syrup.

Within a year or two there have been established in Georgia a broom factory, a cigar factory, an electric-light plant, a flouring mill, ice factories, and a cheese-making plant; but the cotton-mill industry has made the greatest progress of any. At Tifton, Quitman, Cochran, Hampton, Pelham, Moultrie, Dublin, Cordele, and Columbus mills are either newly erected or in process of construction, while there are three new ones in Atlanta. These are being fitted with machinery for doing all kinds of work, from the weaving of cotton fabric to the manufacture of oil from cotton seed.

The railroads have been active in assisting colonies to settle in districts especially favorable to manufactures or farm industry.

Political.—The Democratic State Convention was held June 14, in Atlanta. The platform approved the State administration, and commended the chief executive and each of the State officials; congratulated the people of Georgia on the present system of public schools; favored an amendment to the Constitution limiting the power of the General Assembly to levy and assess taxes exceeding a specified percentum; favored an amendment to the Federal Constitution providing for election of United States Senators by direct vote of the people; favored immediate construction and control of the Nicaraguan Canal by the United States; renewed belief in the allegiance to the principles of Democracy as contained and enumerated in the national Democratic platform of 1896; denounced trusts; adhered to the doctrine of a tariff for revenue only; and demanded repeal of the tax on State bank issues.

The following ticket was nominated: For Governor, A. D. Candler; Secretary of State, Philip Cook; Comptroller General, William A. Wright; State Treasurer, Robert E. Park; Attorney-General, James M. Terrell; State School Commissioner, G. R. Glenn; Commissioner of Agriculture, O. B. Stevens; Prison Commissioner (full term), Clement A. Evans; Prison Commissioner (unexpired term), Thomas Eason; Associate Justices Supreme Court, Henry T. Lewis, William A. Little; United States Senator, A. O. Bacon.

The Republicans met in State convention in Atlanta in March, and nominated a full ticket.

The Populists held a State convention in Atlanta in April, and named a full State ticket. The platform declared: "As the fusionists who betrayed the People's party and our own gallant chieftain, Thomas E. Watson, and thereby demoralized our hitherto impregnable band of patriots, have themselves been shaken off and our ranks cleared and purified by their expulsion from our party, so have our once broken ranks been reformed, revived by the spirit of loyal hope and confidence.

"The People's party yields nothing in its opposition to licensed saloons as a public nuisance. The gospel of Christ is the solution of every human problem and the correction of every evil. We appeal to the Christians of Georgia to unite with us in our efforts to suppress this monster evil, so long fostered and nourished by the Democratic party as a means to acquire office at the expense of Christianity and to the degradation of man.

"We favor an amendment to the Constitution of this State providing for an initiative and referendum and the imperative mandate in legislation, submitting to the people for ratification or rejection all important legislative enactments.

"We emphatically condemn the convict law passed by the Legislature of 1897 as being the enactment of a system more iniquitous than the old lease act.

"We denounce the present fee system and demand that all public officials, where practicable, be placed upon salaries proportionate to the depressed financial condition from which the laborers of the country suffer.

"We denounce the Democratic party for its extravagant administration, increasing the burden of taxation upon the people from year to year, until the people groan under the oppression of high taxes."

At the State election, in October, Allen D. Candler, Democratic candidate for Governor, received 90,445 votes; George W. Trayler, the Populist candidate, 23,235. A constitutional amend-

ment giving pensions to the widows of Confederate soldiers was carried by a small majority. In many places no vote concerning it was cast.

At the presidential election, in November, the State gave 46,665 plurality for William J. Bryan. The vote was the lightest ever cast in Georgia. There was no opposition to the Democratic candidates for Congress.

GERMANY, an empire in central Europe, composed of the federated German states. The King of Prussia is German Emperor, and in this capacity has supreme charge of political and military affairs, with power to make war and declare peace, except that for an offensive war he must have the consent of the federated states and princes. There are two legislative bodies with concurrent powers—the Bundesrath, representing the confederated states, and the Reichstag, representing the German people. The acts upon which they agree become law on receiving the Emperor's assent and being countersigned by the Chancellor of the Empire. The Bundesrath has 58 members, appointed by the governments of the federated states. The Reichstag has 397 members, 1 to 124,500 of population, elected by universal manhood suffrage and by secret ballot for the term of five years. Alsace-Lorraine, the imperial province, is represented by 4 commissioners, who sit in the Reichstag without having votes. Out of 10,628,992 registered electors 7,702,265 voted in the election of 1893. The Emperor has power to dissolve the Reichstag with the consent of the Bundesrath, in which event elections must take place within sixty days and the Reichstag be convoked within ninety days. The imperial ministers act independently of each other under the supervision of the Chancellor. The Chancellor of the Empire at the beginning of 1900 was Prince Hohenlohe-Schillingsfürst, appointed Oct. 29, 1894. The following ministers had charge of the several departments of state: Minister of Foreign Affairs, Graf von Bülow; Minister of the Interior and Representative of the Chancellor in the Reichstag, Graf von Posadowsky-Wehner; Head of the Admiralty and Admiral Commanding in Chief, Rear-Admiral Tirpitz; Minister of Justice, A. Nieberding; Imperial Treasurer, Freiherr von Thielmann. The heads of the various imperial bureaus were: Post Office, Lieut.-Gen. D. von Podbielsky; Imperial Railroads, Dr. Schultz; Imperial Exchequer, Herr Magdeburg; Imperial Invalid Fund, Dr. Rösing; Imperial Bank, Dr. Koch; Imperial Debt Commission, Herr von Hoffmann.

Area and Population.—The total area of the German Empire is 208,830 square miles. The population on Dec. 2, 1895, was 52,279,901, having increased at an average annual rate of 1.12 per cent. since 1890. The number of households was 11,256,150. The number of marriages in 1897 was 447,770; of births, 1,991,126; of deaths, 1,206,492; excess of births, 784,634. The number of emigrants in 1898 was 21,899, of whom 17,272 were destined for the United States, 785 for Brazil, 1,302 for other parts of America, 1,092 for Africa, 223 for Asia, and 163 for Australia. The destination of 1,062 who sailed from French ports was not reported. The emigrants who sailed from German ports and from Antwerp, Rotterdam, and Amsterdam, consisted of 11,667 males and 9,170 females. There were 2,283 families, comprising 7,277 persons. The total number of emigrants from Germany since 1870 was 2,451,312, of whom nearly 90 per cent. went to the United States. Of the emigrants of 1898 Prussia furnished 12,161, Bavaria 2,124, Württemberg 1,151, Saxony 1,128, Hamburg 1,479, Baden 713, Hesse 316, Bremen 427, Oldenburg 205, Mecklenburg-Schwerin 153, and Alsace-Lorraine 135. The number of emigrants from

countries outside of Germany who embarked at German ports in 1898 was 83,805.

Education is compulsory throughout Germany, and every commune is compelled to support one or more elementary schools. In the towns are commercial schools for the business class, and for the working classes continuation and night schools. The number of Gymnasias, which fit students to enter the universities by a course of nine years in the classics and other studies, was 439 in 1897; the number of Progymnasias, which have not the higher grades of the Gymnasias, was 92; the number of Realgymnasias, in which modern subjects replace Greek, was 128; Realprogymnasias, 93; Oberrealschulen, in which modern languages are taught instead of Latin and Greek, 40; Realschulen, 198; commercial colleges, 2; other public secondary schools, 32; private schools, 56; teachers' seminaries, 181; special schools, 32; polytechnics, 9; agricultural schools, 31; schools of mining, 15; schools of architecture and building, 15; academies of forestry, 9; schools of art and art industry, 23; schools of navigation, 47; schools of music, 7. There are 21 universities, namely, Berlin, with 418 professors and teachers and 4,997 students in 1899; Munich, with 194 professors and teachers and 4,257 students; Leipsic, with 220 professors and teachers and 3,270 students; Bonn, with 152 professors and teachers and 2,140 students; Freiburg, with 119 professors and teachers and 1,670 students; Breslau, with 169 professors and teachers and 1,621 students; Halle, with 148 professors and teachers and 1,613 students; Tübingen, with 104 professors and teachers and 1,525 students; Heidelberg, with 149 professors and teachers and 1,462 students; Göttingen, with 131 professors and teachers and 1,307 students; Marburg, with 93 professors and teachers and 1,222 students; Würzburg, with 88 professors and teachers and 1,214 students; Strasburg, with 129 professors and teachers and 1,079 students; Erlangen, with 69 professors and teachers and 1,042 students; Kiel, with 100 professors and teachers and 901 students; Greifswald, with 95 professors and teachers and 834 students; Giessen, with 82 professors and teachers and 814 students; Königsberg, with 119 professors and teachers and 794 students; Jena, with 97 professors and teachers and 732 students; Münster, with 48 professors and teachers and 594 students; Rostock, with 55 professors and teachers and 475 students. There is a naval academy and school at Kiel, and at Berlin and Munich are military academies, and there are 9 cadet schools and 9 military schools.

Finances.—The revenue of the Imperial Government for 1901 was estimated at 1,783,042,000 marks from ordinary and 275,291,000 marks from extraordinary sources; total, 2,058,334,000 marks. The total estimated expenditure was 1,979,135,000 marks. The revenue from customs and excise duties in 1900 was estimated at 742,261,000 marks; from stamps, 61,648,000 marks; from posts and telegraphs, 47,065,300 marks; interest of the Invalid fund, 27,938,500 marks; revenue from railroads, 26,583,600 marks; from the Imperial Bank, 9,789,600 marks; from the printing office, 1,873,900 marks; various receipts, 1,013,300 marks; federal contributions, 489,953,800 marks; other contributions, 14,696,900 marks; extraordinary receipts, 88,388,600 marks; total estimated revenue, 1,526,188,000 marks. The estimated expenditures for 1900, including supplementary estimates, amounted to 1,551,709,400 marks, of which 1,300,309,800 marks were ordinary recurring expenditures and 251,399,600 marks nonrecurring and extraordinary expenditures. Of the recurring expenditures 519,824,500 marks were for the army, 481,908,400

marks for the imperial treasury, 75,613,300 marks for the imperial debt, 69,103,100 marks for the navy, 65,295,600 marks for the Pension fund, 4,348,000 marks for the Ministry of the Interior, 7,938,500 marks for the Invalid fund, 11,999,900 marks for the Ministry of Foreign Affairs, 2,117,900 marks for the Ministry of Justice, 693,300 marks for the Reichstag, 840,100 marks for the audit bureau, 390,600 marks for railroads, and 236,600 marks for the imperial chancellery. Of the federal contributions in 1900 Prussia paid 298,040,500 marks, Bavaria 54,733,000 marks, Saxony 35,453,300 marks, Württemberg 19,693,200 marks, Baden 16,265,100 marks, Alsace-Lorraine 15,494,400 marks, Hesse 9,716,800 marks, Hamburg 6,370,400 marks, Mecklenburg-Schwerin 5,593,500 marks, Brunswick 4,063,800 marks, Oldenburg 3,496,200 marks, Saxe-Weimar 3,176,100 marks, Anhalt 2,445,200 marks, Saxe-Meiningen 2,189,100 marks, Saxe-Coburg-Gotha 2,026,100 marks, Bremen 1,838,900 marks, Lippe 1,263,500 marks, Reuss-Schleiz 1,241,500 marks, Mecklenburg-Strelitz 950,100 marks, Schwarzburg-Rudolstadt 830,400 marks, Lübeck 779,500 marks, Schwarzburg-Sondershausen 728,200 marks, Reuss-Greiz 631,300 marks, Haldeck 540,300 marks, Schaumburg-Lippe 385,400 marks.

The funded debt of the empire on March 31, 1898, consisted of 1,240,000,000 marks of 3½-per-cent. and 942,246,800 marks of 3-per-cent. bonds; total, 2,182,246,800 marks. Of the old debt of the North German Confederation 17,700,000 marks remained unpaid, and the unfunded debts were 6,000,000 marks of treasury bonds and 120,000,000 marks of paper money, making the total liabilities 2,372,264,500 marks, the 3-per-cent. bonds having been increased by 40,000,000 marks during the year and the treasury bonds by 10,000,000 marks. The amount of the Invalid fund was 5,741,710 marks. The war fund of 120,000,000 marks was preserved in specie.

The budgets and debts of the individual states, in the case of the most of them for 1900, in that of the others for 1899, are given in marks in the following table:

STATES.	Revenue.	Expenditure.	Debt.
Alsace-Lorraine.....	57,788,731	57,664,066	23,842,900
Anhalt.....	26,417,450	26,417,450	187,500
Baden.....	66,068,577	62,120,313	325,625,433
Bavaria.....	379,358,055	379,358,055	1,435,395,775
Bremen.....	22,373,106	22,329,925	138,567,500
Brunswick.....	14,461,000	14,461,000	28,102,862
Burg.....	63,910,202	62,316,722	345,305,761
Coburg.....	37,373,169	37,418,125	239,769,225
Coburg.....	1,339,898	1,393,086	1,167,998
Coburg.....	5,019,705	5,019,705	18,613,021
Coburg.....	4,261,000	4,261,000	111,585,200
Coburg.....	8,133,621	8,265,605	66,107,490
Coburg.....	2,326,327,348	2,326,327,348	6,505,680,595
Coburg.....	1,540,883	1,540,883	1,040,555
Coburg.....	2,731,403	2,731,403	867,450
Coburg.....	4,571,834	4,571,834	3,077,253
Coburg.....	8,077,426	4,664,502	8,087,253
Coburg.....	7,624,330	6,804,800	9,084,949
Coburg.....	10,461,076	10,461,076	93,567,670
Coburg.....	82,934,955	82,934,955	732,464,950
Coburg.....	1,023,970	1,023,970	481,500
Coburg.....	2,778,050	2,778,050	3,884,000
Coburg.....	2,985,755	2,985,755	3,257,951
Coburg.....	1,546,779	1,546,779	1,971,000
Coburg.....	81,498,086	80,750,107	498,068,800

In Alsace-Lorraine there was also an extraordinary revenue of 4,387,908 marks and an expenditure of 4,847,240 marks provided for. Anhalt has 9,201 marks' worth of public property. The debt of Baden is secured on the railroads, which produced a net revenue of 23,299,488 marks in

1897 and have cost the state 489,000,000 marks to build. Nearly half of Bavaria's revenue is derived from railroads, posts, telegraphs, and mines, and of the debt 1,090,441,943 marks were raised for building railroads, which yielded above expenses and interest 13,882,044 marks in 1897. The debt of Bremen, incurred for railroads and harbor works, requires a great part of the revenue to pay the interest. Brunswick devotes a separate revenue of 2,634,000 marks to education and art, and the duke's civil list of 1,125,000 marks is also outside of the budget; besides the revenue from domains and forests and from an invested fund of 41,300,000 marks, the state receives an annuity of 2,625,000 marks on account of the railroads transferred to Prussia, while it has to pay an annuity of 1,219,740 marks to extinguish a premium loan that is separate from the general debt, 80 per cent. of the latter having been spent on railroads. The debt of Hamburg, incurred for public improvements, absorbs 13,714,500 marks of the revenue, one third of which is raised, as in Bremen also, by direct taxation, which in Hamburg is as much as 30 marks per capita. In Hesse the debt is represented by railroads; there was an extraordinary revenue of 4,021,388 marks and extraordinary expenditure of 3,224,900 marks. Lübeck possesses domains and forests and invested funds from which two fifths of the revenue is obtained, and direct taxes give most of the remainder, while of the expenditure one fourth goes for interest and amortization of the debt. The budget of Mecklenburg-Schwerin is the common budget, exclusive of the separate revenue of the states and the revenue of the grand duke, which amounts to 20,926,000 marks a year, derived from domains, funds, and railroads, in value far exceeding the debt. In Mecklenburg-Strelitz the grand duke bears the whole cost of the public administration, and publishes no accounts of his revenue and expenditure; there is a debt of about 6,000,000 marks. Of the revenue of Prussia 92,022,804 marks come from domains and forests, 183,131,800 marks from direct taxes, 78,885,000 marks from indirect taxes, 82,475,900 marks from the lottery, 2,357,900 marks from the marine bank, 364,070 marks from the mint, 149,289,988 marks from mines, furnaces, and salt works, 1,285,962,519 marks from railroads, 334,980,560 from the finance administration and dotations, 71,117,200 marks from the Ministry of Justice, 16,734,631 marks from the Ministry of the Interior, 8,038,000 marks from the Ministry of Public Works, 5,237,281 marks from the Ministry of State, 4,683,566 marks from the Ministry of Agriculture, 4,448,359 marks from the Ministry of Instruction and Worship, 4,446,381 marks from the Ministry of Industry and Commerce, 2,146,489 marks from the Ministry of State, 4,600 marks from the Ministry of Foreign Affairs, and 300 marks from the Ministry of War. Of the total expenditure of the Prussian Government 1,050,953,098 marks are working expenditure, of which 45,396,150 marks are required for the domains and forests, 122,649,240 marks for financial administration, 127,955,497 marks for the operation of mines, furnaces, and salt works, and 754,953,111 marks for the operation of railroads; 648,085,662 marks are charges on the consolidated fund, of which 227,685,246 marks are interest on the public debt, including railroad debts, 39,033,903 marks the annual sinking fund, 298,068,026 marks the annual contribution to imperial funds, 70,970,991 marks appanages, annuities, and indemnities, 8,000,000 marks the addition to the King's crown dotation, 2,444,140 marks expenses of management, etc., 1,672,915 marks the expense of the Chamber of Deputies, and 210,440 marks that of the Chamber

of Lords; 488,135,878 marks are the cost of the state administration, of which 105,757,000 marks are assigned to the Ministry of Justice, 137,758,158 marks to the Ministry of Instruction and Worship, 64,961,338 marks to the Ministry of the Interior, 30,440,660 marks to the Ministry of Public Works, 21,659,785 marks to the Ministry of Agriculture, Domains, and Forests, 10,656,288 marks to the Ministry of Commerce and Industry, 108,094,209 marks to the Ministry of Finance, 551,300 marks to the Ministry of Foreign Affairs, 138,297 marks to the Ministry of War, and 8,118,843 marks to the Ministry of State. The total ordinary expenditure of Prussia amounts to 2,187,175,538 marks; extraordinary expenditure, 139,151,810 marks. For the year ending March 31, 1901, the revenue is estimated at 2,472,266,033 marks, including 166,409,282 marks to be expended for extraordinary purposes. The national debt of Prussia bears $\frac{3}{4}$ per cent. interest, except 865,000,000 marks of 3-per-cent. bonds, and the annual charge in 1900 for interest, sinking fund, and management amounted to 237,956,411 marks. The expenditure of the Prussian Government amounts to 73 marks per capita; the direct taxes are 5.70 marks, including only the income tax, the supplementary tax on investments, and the tax on commercial travelers, as in 1895 the land and house taxes and the trade licenses were transferred to the communes. The annual average income in Prussia per capita is estimated at 342 marks; the total national income at 10,000,000,000 marks. The revenue of the Saxon duchies is derived in great part from domains, and direct taxes provide the rest. Saxe-Altenburg's small debt can be extinguished by funds accumulated in the treasury six times the amount. In the others the debts are more than covered by property and cash assets. The Kingdom of Saxony receives a net revenue from railroads more than covering the expenses of the debt, which are 31,575,000 marks a year, and from the railroads and the domains, forests, and mines it gets more than half its total revenue and taxes only lightly the incomes and earnings of the population, estimated at a total of 2,000,000,000 marks a year. The debt of Württemberg, the bulk of which pays $\frac{3}{4}$ per cent. interest, was contracted mainly for railroads.

The Army.—The German army is organized territorially, and the army corps are distributed as follow: First, East Prussia; Second, Pomerania; Third, Brandenburg; Fourth, Prussian Saxony; Fifth, Posen; Sixth, Silesia; Seventh, Westphalia; Eighth, Rhenish Prussia; Ninth, Schleswig-Holstein; Tenth, Hanover; Eleventh, Hesse-Nassau; Twelfth, Saxony; Thirteenth, Württemberg; Fourteenth, Baden; Fifteenth, Alsace; Sixteenth, Lorraine; Seventeenth, West Prussia; Eighteenth and Nineteenth, Bavaria. The Prussian Guards form the Twentieth Corps, and in time of war the separate Hessian division will be strengthened to form the Twenty-first Army Corps. Each army corps can be mobilized independently and take the field as a complete fighting unit, composed of troops of all arms and having its separate stores and equipments. A corps is composed of 2 divisions of infantry, each of 2 brigades, each brigade of 2 regiments of 3 battalions each, with 4 squadrons of cavalry and 4 field batteries of 6 guns, and either a rifle battalion or a battalion of pioneers attached to every infantry division; and besides the divisional cavalry and artillery every corps contains a cavalry division of 4 regiments, with 2 batteries of horse artillery attached, an artillery reserve of 6 field batteries and 1 mounted battery, a battalion of pioneers, and a battalion of train. The battalion of infantry on

the peace footing is 544 men, to be raised in war to 1,002 by calling in part of the reserves. The troops stationed in Alsace-Lorraine and the guard corps are kept at the strength of 686 men in peace time. The total number of field batteries, including 47 mounted batteries, is 494, usually of 4 guns in time of peace and 6 guns in war. The total number of men trained in the German army and available for war is estimated at 3,000,000. The effective strength of the army on the peace footing in 1899 was 23,230 officers and 502,266 men, with 98,038 horses. There are 215 regiments of infantry, numbering 12,028 officers and 362,469 men; 19 battalions of rifles, 410 officers and 11,974 men; 288 district commands, 819 officers and 5,548 men; and 2,572 men in the administrative service, schools, etc., making a total of 13,257 officers and 382,563 men in the infantry. The cavalry numbers 93 regiments, containing 2,385 officers and 65,710 men, besides 813 on special duty. In the 43 regiments of field artillery there were 2,671 officers and 57,843 men, besides 810 on special duty. The foot artillery consists of 17 regiments and 1 battalion, containing 873 officers and 22,702 men, besides 134 on special duty. The engineers consisted of 23 battalions of pioneers, 3 railroad regiments, 2 balloon detachments, 1 railroad battalion, and 3 railroad companies, containing in all 738 officers and 19,014 men, besides 127 on special duty. Of train there are 21 battalions, containing 310 officers and 7,745 men, besides 60 on special duty. There were 529 officers and 4,453 men in the special formations, and the number of general officers and officers not attached to regiments was 2,467, with 283 men. Every German is liable to military service, and no substitution is allowed. All troops are bound to obey the German Emperor, to whom they swear an oath of fidelity, except the Bavarians, who are not required to take the oath in time of peace. Bavaria, Saxony, and Württemberg have war ministries of their own, and the kings reserve the right to appoint the officers; but the Emperor's approval is necessary for all appointments, and nothing affecting the superior direction of the troops of any state can be done without his consent. The period of service in the active army and its reserve is six years for the infantry and seven for the cavalry and field artillery, and service with the colors is two years for infantry and three years for the other arms. When the entire period has expired the soldier is inscribed in the *Landwehr* for five years, or in the case of the cavalry and artillery soldiers, who have to serve one year longer, in the standing army and reserve. At the age of twenty the young men are summoned for service; out of about 360,000 who are liable the annual contingent is obtained by lot, and all who are not drawn are inscribed in the *Ersatz* reserve, in which they should receive twenty weeks of training in three different periods, although many of them are never called out for drill, and in time of war they may be drafted into the army to fill depleted ranks, otherwise they pass at the end of twelve years into the *Landsturm*, the final levy for the defense of the fatherland, to which every able-bodied man between seventeen and forty-five years of age belongs unless he is in the active army or its reserve or in the *Landwehr*. Scattered among the active troops are educated young men, about 8,000 each year, serving at their own expense a single year, from whom many of the *Landwehr* officers are selected. Among the improvements introduced most recently in the German army is the formation of machine-gun detachments, to be attached to rifle or infantry regiments in all the army corps. Experiments

have been made with motor wagons for the transport of food and ammunition and with balloons filled with hydrogen gas for use in fortresses. The increase of the army on a peace footing for 1901 is 295 officers, 25 surgeons, 3,125 rank and file, and 1,556 horses.

The Navy.—The naval programme sanctioned by the Reichstag in 1898 provided for a fleet of 17 battle ships, besides 2 in reserve; 8 smaller battle ships, already existing; 9 large and 26 small cruisers, besides 3 large and 4 small ones as a reserve. This was exclusive of the 8 torpedo gunboats, 19 gunboats, 35 first-class torpedo boats, 103 smaller torpedo boats, and various training ships and vessels for special service that were in existence. To complete the programme it was necessary to build 7 new battle ships and 2 large and 7 small cruisers before 1906, and the total cost was estimated at 1,000,000,000 marks. There were afloat at the beginning of 1900, of second-class battle ships 8, and 6 were building; 8 third-class battle ships; 19 coast-defense vessels; 8 second-class cruisers, and 2 were building; and 5 third-class cruisers. The programme of 1898 was regarded at the time as fixing the final strength of the navy, and no new vessels were to be built excepting as they were required to replace the old ones, which would, at the end of a certain period determined for each class, be relegated to the reserve. The battle ships of the class of Kaiser Friedrich der Dritte, launched in 1896, have a displacement of 11,180 tons, 11½ inches of armor at the water line, engines of 13,000 horse power, giving a speed of 18 knots, and an armament of 4 9.4-inch guns and 18 6-inch, 12 3.4-inch, and 18 small quick firers. Of this type are Kaiser Wilhelm II, launched in 1897; Kaiser Wilhelm der Grosse, launched in 1899; and the Kaiser and Deutschland, yet to be built. A new ship has been built on the plan of the Fürst Bismarck, launched in 1897, of 10,650 tons, with 8-inch armor, 14,000 horse engines, a speed of 19 knots, and a battery of 4 9.4-inch, 12 6-inch quick-firing, 10 3.4-inch quick-firing, and 18 machine guns. Three new ships of the larger class will have a displacement of 12,000 tons, 12 inches of armor, the same steaming capacity as the Deutschland, and the same armament. A new type of cruiser is the Hertha class, comprising also the Freya, Victoria Luise, Vineta, Hansa, and two others not yet completed, having a displacement of 5,650 tons, 4 inches of deck armor, and an armament of quick-firing guns—2 8.2-inch, 8 6-inch, and 10 3.4-inch—protected by armor, with water-tube boilers, 10,000 horse power, giving a speed of 18½ knots. The German cruisers have no woodwork, and guns are mounted in every available part of the superstructure, giving a remarkably heavy total energy of fire. The small deck-protected cruisers Gazelle, Niobe, and Nympe, of 2,850 tons, with engines of 6,000 horse power making 19½ knots, are armed with 10 4-inch quick-firers.

A new naval programme practically doubling the strength of the navy as previously fixed was the chief subject of debate in the Reichstag session of 1900. It proposed to increase the number of battle ships from 19 to 38, the number of large cruisers from 12 to 20, and the number of small cruisers from 30 to 45. In the next sixteen years 3 large and 3 small ships are to be annually placed on the stocks. In order to bring the fleet intended for active service up to its full strength as soon as possible the new vessels intended for two new squadrons will be completed before the ships in the reserve fleet are replaced by new constructions. Each of the new squadrons will consist of a flagship, 8 battle ships, 2 large and

8 small cruisers for scouting purposes with the fleet when stationed in home waters, and 5 large and 5 small cruisers for service on foreign stations. The reserve will be increased by 2 battle ships, 1 large and 2 small cruisers. The monitors of the Siegfried class will be replaced by battle ships. The first two squadrons of the new navy will form the fleet on active service and the third and fourth squadrons will form the reserve fleet, half of which, as well as the entire active fleet, is to be kept in constant use.

The *personnel* of the German fleet for 1900 consisted of 1,118 executive officers, 1,119 warrant officers, 142 surgeons, 5,193 petty officers, 18,079 seamen, and 1,000 boys. An increase of 33,746 men is calculated for the navy as it will be in 1920. The increase provided for in the budget of 1901 is 91 officers, 11 surgeons, and 2,735 men. The vessels to be placed on the stocks during the year are 2 battle ships, 1 large cruiser, and 2 small cruisers. The naval estimates show an increase of 49,000,000 marks over the estimates of the preceding year.

Commerce and Production.—The production of wheat in 1899 was 3,292,945 metric tons of 2,200 pounds; of rye, 7,532,706 tons; of barley, 2,514,024 tons; of oats, 5,780,699 tons; of buckwheat, 99,487 tons; of potatoes, 31,791,683 tons; of hay, 21,971,628 tons; of sugar beets, 11,568,589 tons; of fodder beets and turnips, 10,502,608 tons; of hops, 21,867 tons; of wine, 1,406,818 hectolitres. The output of coal in 1898, according to the provisional report, was 96,280,000 tons; of lignite, 31,648,500 tons; of iron ore, 15,893,200 tons; of zinc ore, 641,700 tons; of lead ore, 151,600 tons; of salt, 702,800 tons; of potassic salt, 2,208,900 tons; of other mine products, 300,200 tons. The value of all the mineral products was 939,000,000 marks. The quantity of pig iron produced in 1897 was 6,881,466 tons; of zinc, 150,739 tons; of lead, 118,881 tons; of copper, 29,408 tons; of silver, 448 tons; of tin, 929 tons; of sulphur and sulphuric acid, 625,447 tons; of gold, 2,781 kilogrammes; of nickel, bismuth, vitriol, and other products, 34,776 tons. The total value of foundry products was 531,824,814 tons. The quantity of manufactured iron made was 7,697,883 tons, valued at 1,009,899,942 marks. The exports of fresh fish in 1898 were valued at 6,600,000 marks, while the imports were 28,600,000 marks, those of salt herrings 35,700,000 marks, and those of other cured fish 5,100,000 marks in value. There were 402 sugar factories in 1898, which out of 13,697,892 tons of beets produced 1,755,229 tons of raw sugar and 344,480 tons of molasses. The production of refined sugar was 1,207,350 tons. From starch were obtained 7,527 tons of sugar, 35,413 tons of sirup, and 4,207 tons of coloring matter. The quantity of beer brewed in 1898 was 66,423,000 hectolitres, of which 16,982,000 hectolitres were brewed in Bavaria, which has its own excise laws and forbids the use of any material but malt, hops, and water. The quantity of alcohol produced in 60,779 distilleries was 3,288,000 hectolitres.

The total value of the special imports in 1898 was 5,439,676,000 marks; of the special exports, 4,010,565,000 marks. The imports of live animals were 182,169,000 marks in value, including 91,712,000 marks for horses and 5,961,000 marks for hogs; exports of live animals, 20,872,000 marks; imports of animal products were 150,508,000 marks, and exports 32,622,000 marks; imports of articles of consumption were 1,636,867,000 marks, and exports 483,227,000 marks; imports of seeds and plants were 56,034,000 marks, and exports 34,080,000 marks; imports of fuel were 137,025,000 marks, and exports 209,578,000 marks; imports of fats and oils were 271,140,000 marks, including

80,173,000 marks for petroleum, exports of fats and oils, 31,272,000 marks; imports of chemicals, drugs, and colors were 281,190,000 marks, and exports 377,842,000 marks; imports of stone, clay, glass, and manufactures thereof were 71,803,000 marks, and exports 154,825,000 marks; imports of metals, raw and manufactured, were 654,966,000 marks, and exports 739,391,000 marks; imports of timber and wood manufactures were 396,349,000 marks, and exports 133,112,000 marks; imports of paper and paper manufactures were 26,536,000 marks, and exports 103,443,000 marks; imports of hides and leather were 248,991,000 marks, and exports 236,685,000 marks; imports of textile materials and manufactures were 1,092,424,000 marks, and exports 890,682,000 marks; imports of rubber and rubber goods were 68,614,000 marks, and exports 54,781,000 marks; imports of machinery and instruments were 101,433,000 marks, and exports 264,653,000 marks; imports of hardware and cutlery were 21,510,000 marks, and exports 106,483,000 marks; imports of books and art objects were 42,117,000 marks, and exports 136,191,000 marks; miscellaneous exports, 826,000 marks. The value of wheat imported was 231,447,000 marks; of rye, 102,595,000 marks; of barley, 132,776,000 marks. The imports of coffee were 137,028,000 marks in value. The value of raw hides imported was 141,479,000 marks. The main textile materials imported were raw cotton for 250,792,000 marks, wool for 241,406,000 marks, and raw silk for 103,135,000 marks, and 92,239,000 marks were paid for imported woolen yarns. The chief exports of textile manufactures were woolen goods for 133,647,000 marks, mixed silk and cotton cloth for 103,192,000 marks, coarse cottons for 67,272,000 marks, and hosiery for 80,709,000 marks, and trimmings and haberdashery were exported to the amount of 90,661,000 marks. The exports of leather goods were 76,548,000 marks in value; of paper, 59,280,000 marks; of wooden wares, 66,715,000 marks. The value of aniline dyes exported was 71,950,000 marks. Coal exports amounted to 200,493,000 marks. The exports of sugar reached 212,357,000 marks; hop exports, 27,135,000 marks. Home manufactures and agricultural products are encouraged by protective duties, and on spirits, malt, salt, sugar, and tobacco internal taxes are levied. Of the total imports in 1898 the value of 2,853,988,000 marks paid duties amounting to 515,326,000 marks, an average of 18.1 per cent. of the values of dutiable goods; and the value of 2,585,688,000 marks were free of duty. The imports of gold and silver in 1898, included under metals, were 337,372,000 marks; exports, 253,511,000 marks.

The year 1899 was one of extraordinary business activity in Germany, and was marked by a general advance of prices, especially in coal and iron, the increasing want of which was felt more than at any time in the previous five years, and was likely to become more acute on account of the prospective rapid increase of the German navy. The enhancement of prices was in part brought about by the operation of combinations and rings among producers, the number of which had increased in three years from 350 to about 550. The imports of iron and iron manufactures were 839,839 tons in 1899, an increase since 1897 of 275,094 tons and an increase in value of 32,060,000 marks. The imports of machinery and implements were 150,439 tons, an increase of 67,982 tons in quantity and 26,855,000 marks in value. The exports of iron and iron manufactures amounted to 1,509,887 tons in 1899, an increase of 116,934 tons in quantity and 82,001,300 marks in value; exports of machinery and implements were 283,245 tons, an in-

crease of 72,727 tons and in value of 59,800,000 marks. The rapid growth of manufactures in Germany has produced a dearth of both labor and capital that tends to check continued expansion. The constant rise of industrial wages has not only depleted the agricultural districts of their laborers and diminished emigration, but attracts laborers from Slavic countries and Italy. The lack of capital has several times caused stringency in the money market, which may be rendered acute when the Imperial Government applies for loans to build the new navy and the Prussian Government for the money to dig the Midland Canal.

The distribution of the special commerce of 1898 is shown in the following table, giving in marks the value of imports from and exports to each country.

COUNTRIES.	Imports.	Exports.
Great Britain	826,380,000	804,728,000
Russia	736,519,000	440,506,000
Austria-Hungary	661,176,000	463,688,000
France	269,308,000	205,901,000
Netherlands	184,110,000	220,091,000
Switzerland	173,518,000	255,938,000
Belgium	201,356,000	187,572,000
Norway and Sweden	131,095,000	170,216,000
Italy	170,315,000	94,388,000
Denmark	65,617,000	120,236,000
German free ports	16,092,000	66,909,000
Turkey and Greece	79,008,000	89,369,000
Spain	48,148,000	24,725,000
Portugal	17,564,000	15,005,000
North America	920,090,000	883,364,000
South America	408,517,000	148,935,000
British India	230,942,000	57,131,000
The rest of Asia	118,394,000	112,956,000
Africa	97,161,000	63,465,000
Australia	88,295,000	34,669,000
Other countries	3,662,000	583,000
Total	5,439,676,000	4,010,565,000

Navigation.—The German merchant navy, Jan. 1, 1899, comprised 2,490 sailing vessels, 601,161 tons, and 1,223 steamers, of 1,038,391 tons total, 3,713 vessels, of 1,639,552 tons, counting seagoing craft of more than 17.65 tons, but not vessels engaged in coasting and inland navigation, of which, on Jan. 1, 1898, there were 22,564, 3,371,247 tons. Of the sailing vessels trading with foreign ports 431, of 48,861 tons, and of the steamers 427, of 170,857 tons, belonged in the Baltic while 2,059 sailing vessels, of 552,300 tons, and 796 steamers, of 807,534 tons, belonged to North Sea ports. The crews of the merchant vessels numbered 43,146 men. Of the sailing vessels 5,831 and of the steamers 1,214, were of iron or steel. There were 46 sailing vessels and 303 steamers over 2,000 tons, 211 sailing vessels and 195 steamers between that and 1,000 tons, 107 sailing vessels and 236 steamers from 500 to 1,000 tons, 3 sailing vessels and 343 steamers between 100 and 500 tons, and 1,787 sailing vessels and 146 steamers under 100 tons. The length of navigable rivers in Germany is 5,831 miles, not counting 1,371 miles of canalized rivers; the length of canals, 1,415 miles. The Kaiser Wilhelm Ship Canal, connecting the naval ports of Kiel and Wilhelmshaven, 18 miles long, with a breadth of 213 feet at surface and 72 feet at bottom and a depth of 29½ feet, was built at a cost of 156,000,000 marks primarily to afford a safe and quick passage for naval forces between the North Sea and the Baltic. In aggregate tonnage the German commercial marine stands second in the world, and its proportion to that of the whole world has risen twenty-five years from 5 to 9 per cent., the German steam tonnage having increased tenfold.

Railroads, Posts, and Telegraphs.—The mileage of completed railroads in Germany

creased from 27,851 miles in 1893 to 30,093 in 1898. In the beginning of 1899 there were 31,150 miles in operation, of which 2,945 miles belonged to companies, and of these 120 miles were operated with the Government system. The narrow-gauge railroads were only 861 miles in length, of which 412 miles belonged to the state. The capital expenditure up to 1898 was 11,935,490,000 marks; gross receipts, 1,684,730,000 marks; expenses, 957,674,000 marks; net earnings, 6.09 per cent.; number of passengers, 692,354,000, paying 454,979,000 marks; metric tons of freight, 285,566,000, paying 1,092,227,000 marks.

The number of letters forwarded by the imperial post office during 1898 was 1,306,423,560, by the Bavarian 144,323,680, by the Württemberger 59,337,330; total, 1,510,804,570. The number of postal cards was 612,729,814 in the imperial postal district, 40,240,320 in Bavaria, and 26,666,406 in Württemberg; total, 679,636,540. The number of circulars, etc., was 658,119,006 in the imperial district, 61,799,603 in Bavaria, and 32,322,097 in Württemberg; total, 752,241,606. The number of samples in the imperial district was 45,556,782, in Bavaria 3,819,820, in Württemberg 1,326,208; total, 50,702,810. The number of newspapers was 1,029,841,514 in the imperial district, 214,874,063 in Bavaria, and in Württemberg 51,062,147; total, 1,295,777,724. The value of money remitted was 22,371,535,916 marks in the imperial postal district, 2,164,069,745 marks in Bavaria, and 995,200,790 marks in Württemberg; total, 25,530,806,451 marks. The receipts of the imperial post office from postal, telegraph, and telephone services were 349,150,754 marks, and expenses 311,361,262 marks, leaving a surplus of 37,789,492 marks; receipts of the Bavarian services were 31,837,149 marks, and expenses 27,133,608 marks, leaving 4,703,541 marks; receipts in Württemberg were 14,571,653 marks, and expenses 12,078,434 marks, leaving 2,493,219 marks. The telegraph lines of the imperial post office had a length in 1898 of 64,136 miles, with 245,528 miles of wire; the Bavarian lines a length of 9,557 miles, with 25,948 miles of wire; the Württemberg lines a length of 2,725 miles, with 6,935 miles of wire; total length of lines, 76,418, and length of wire, 278,411 miles. The number of internal telegrams sent in the imperial district was 27,242,694, in Bavaria 2,383,023, and in Württemberg 1,220,661; total, 30,852,378. Of foreign telegrams in the imperial district 10,441,372 were sent, 619,662 in Bavaria, and in Württemberg 213,947; total foreign telegrams, 11,274,981. There were 212,121 telephone connections in 900 towns of the German Empire in 1898, with 18,521 miles of line and 220,104 miles of wire, and the number of conversations was 490,788,565; of long-distance circuits there were 1,251, with 13,400 miles of line and 80,004 miles of wire, and the number of conversations during 1898 was 72,339,266.

Dependencies.—The German possessions overseas have all been acquired since 1884. In Africa the German protectorates have an estimated total area of 930,760 square miles and about 14,200,000 inhabitants (see EAST AFRICA, WEST AFRICA, and German Southwest Africa under CAPE COLONY). In Asia, Germany holds under a lease from the Chinese Government the naval station of Kiaochau, on the Shantung peninsula. The leased area is about 200 square miles, with 60,000 inhabitants. The neutral zone over which the German Imperial Governor has control is 30 miles broad, having an area of 2,500 square miles and a population of 1,200,000. The cost of the administration for 1901 is 9,780,000 marks. A garrison of 1,500 marines is stationed in the fort. The town will be a free port. The Government offers

inducements to German colonists to settle in the protectorate on land it has purchased from the Chinese owners, who are not at liberty to sell to individual Europeans. The coal fields of Wiehsien and Pashan, within 100 miles of Kiaochau, will be worked by German capitalists, who have an option on all mining and railroad enterprises to be undertaken in the Shantung province. The first section of 25 miles of a railroad from Kiaochau was completed early in 1900 after interruptions caused by the opposition of the inhabitants, who attacked the Germans near Kaumi.

The German possessions in the Pacific were increased in 1899 by the annexation of the two largest of the Samoan islands, Great Britain and the United States withdrawing from the tripartite control and relinquishing their rights in respect to these islands; and by the acquisition from Spain of the Caroline and Pelew groups and of the Mariana Islands with the exception of Guam, previously ceded to the United States. The cession, on the other hand, of Choiseul, Isabel, and other islands of the Solomon Archipelago to Great Britain diminished the total land area, which after these changes amounts to about 96,160 square miles, with a population of 427,000. The north-eastern part of New Guinea was declared a German protectorate in 1884, under the name of *Kaiser Wilhelm's Land*. The area is about 70,000 square miles, the population 110,000. There were 58 Europeans in 1899, of whom 53 were Germans. There are over 36,000 coconut palms, which are taken care of for the production of copra. Cotton, tobacco, and coffee have been cultivated experimentally. Besides copra, the natives sell trepang and mother-of-pearl for trade goods. The areca and sago palms, bamboos, and ebony and other woods are found in the forests, and recently gold has been discovered in the Bismarck mountains. The administration was formerly in the hands of the New Guinea Company, but on April 1, 1899, it was assumed, together with that of the Bismarck and Solomon Islands, by the Imperial Government, which appointed as Governor R. von Beninggen. The local revenue for 1899 was estimated at 75,000 marks, and expenditure at 732,000 marks; imperial subvention, 657,000 marks.

The *Bismarck Archipelago* includes Neu Pommern (formerly New Britain), Neu Mecklenburg (formerly New Ireland), Neu Lauenburg (formerly the Duke of York Islands), Neu Hanover, the Admiralty, the Anchorite, the Hermit, and other islands. The aggregate area is estimated at 20,000 square miles, the population at 188,000. There were 200 Europeans in 1899, of whom 96 were Germans, and there were 64 Chinamen and 68 Samoans and Fijians. The imports for 1899 were valued at 1,060,000 marks; exports, 939,110 marks, of which 726,400 marks represent copra and 120,800 marks trepang.

The *Solomon Islands* are divided between Germany and Great Britain. The northern part of the group is the German portion, the area of which was decreased from 9,000 square miles, with 89,000 inhabitants, to 4,200 square miles, with 45,000 inhabitants, by the transfer to Great Britain on Nov. 14, 1899, of islands south and east of Bougainville. The products are tortoise shell and sandalwood.

The *Marshall Islands* have an area of 150 square miles and 15,000 inhabitants, besides 79 Europeans, of whom 50 are Germans engaged in the copra trade. There are plantations of coconut trees that produced 2,729 tons of copra in 1899. The total imports were valued at 465,700 marks.

Savaii and Upolu, of the Samoan group, became German by virtue of the Anglo-German agreement

of Nov. 14, 1899, which the United States accepted and ratified in January, 1900 (see SAMOA).

The Caroline, Pelew, and Marianne, or Ladrone, Islands passed into German possession on Oct. 1, 1899, by virtue of a treaty concluded with Spain on Feb. 12, 1899, for the price of 16,750,000 marks. Until a separate administration shall be organized they are under the authority of the Governor of New Guinea. The estimated annual expenditure is 220,000 marks. In 1899 the sum granted was 465,000 marks, of which 355,000 marks were required for permanent improvements. For 1901 the grant was 370,000 marks. The *Caroline Islands* are of coral formation. There are about 500 isles, of which Ponape, Yap, and Kusai are the chief, containing about 5,400 inhabitants of Malay blood, with Japanese and Chinese intermixture. The *Pelew Islands*, 26 in number, produce copra, tortoise shell, and mother-of-pearl. The German *Marianne Islands* are small and the population is scanty. The total area of the three groups is about 560 square miles, with 40,000 population.

The colonial expenditures of the Imperial Government have mounted in a progressive ratio. The Reichstag voted money in 1900 to continue the railroad in East Africa from Tanga toward Karogwe, but would not consent to begin a central railroad between Dar-es-Salaam and Mrogoro. The employment of the regular marine infantry in Kiaochau is objectionable to the representatives of the people, although the constitutional right of the Emperor to employ the conscripts wherever he wishes can not be disputed. A resolution was passed by the Reichstag requesting the Government to organize the troops in Kiaochau as far as possible on the basis of voluntary enlistment, and to take measures for the creation of a body of Chinese soldiers. The subsidies granted to the colonies for 1901 exceed those of the preceding budget by more than 5,000,000 marks. The subsidy for Southwest Africa is calculated at 9,378,000 marks; for East Africa, 9,117,000 marks; for the Cameroons, 2,192,800 marks; for Togoland, 884,000 marks; for German New Guinea, 709,700 marks; for the Caroline, Pelew, and Marianne Islands, 286,500 marks; for Samoa, 146,000 marks. This list does not include 3,020,807 marks required to cover deficits in former estimates. A sum is demanded for the construction of the central railroad in East Africa in spite of the previous rejection of the project by the Reichstag, and money is wanted to be used in settling agricultural colonists from India, who will receive, in addition to a grant of land, 500 marks each as a bonus to enable them to begin the cultivation of rice and cotton.

The Reichstag.—One of the longest and busiest sessions in the history of the German Reichstag came to an end on June 13, 1899. The first sitting was on Dec. 6, 1898, and when the members separated in June, 1899, the session was not closed, but adjourned in order that the discussion of certain bills that had not been finally disposed of might be resumed when the house met again on Nov. 14, 1899. One of the more important of these was the penal servitude bill, intended to afford protection to workmen who refused to go on strike. This measure the Emperor had suggested and announced, but while it was being discussed a strong agitation was conducted against it in the country, and it was denounced as tending to interfere with the right of coalition. When it was brought up as soon as the Reichstag resumed its sittings the Center, the National Liberals, the Radicals, and the Social Democrats were found arrayed against the Government, and it was rejected on the second reading almost without dis-

cussion. The Government acknowledged the defeat, and to make peace with the majority Prince Hohenlohe, who in 1896 had promised the Reichstag to secure the repeal throughout the empire of the laws forbidding the union of political societies one with another, accepted a resolution passed by the house, and shortly afterward promulgated a decree by which the union of political societies was permitted in all parts of the empire, notwithstanding provisions to the contrary in the laws of some of the states.

The meat inspection bill was another of the measures that engaged the attention of the Reichstag at different periods and underwent various vicissitudes. When originally introduced by the Government its ostensible and primary purpose was to safeguard the public health by preventing the sale of diseased or unwholesome meat. The Agrarians, not satisfied with the degree of protection afforded to German producers by the Government measure, mustered their full strength not only in the Conservative but in the Clerical and the National Liberty party, and with the large majority that they commanded they carried amendments that practically prohibited the importation of foreign meat on the pretext that it is impossible to make sure that meat imported from abroad has been properly inspected in the country of its origin. The Government declined to accept the bill as it passed the second reading. The Government needed the votes of the Agrarians, whose strongest element is the old Junker party of Prussia, joined by the landowning nobility of other parts of Germany. Their support was necessary to carry through the naval bill, but the protests against the transformation of the meat inspection bill that came from the Hanseatic towns and from the trading and working population of the manufacturing centers could not be ignored. To enhance the price of a prime necessary of life was a serious thing, and not less serious was the probable loss of trade and the possible danger of reprisals from the United States, with which an eighth part of the whole foreign commerce of Germany was conducted in 1898. The Agrarian amendments not only placed restrictions of a prohibitive character on foreign meat imports, but lightened the regulations for the inspection of meat slaughtered in Germany. All salted meats except ham and bacon, all meat preserved in tin cans or other vessels, and all sausages or mixtures of minced meat were forbidden to be imported at all. Whole carcasses or half carcasses of beef and pork unskinned and with heart, lungs, and kidneys undisturbed, could be imported up to Dec. 31, 1900, and cooked meat prepared in a way excluding any danger to health, and after that date the importation of all meat or meat products would be unlawful with the exception of lard, bacon, margarine, and sausage skins. The date is that of the expiration of the commercial treaties, by which time it was expected that Germany would be able to supply all the meat required for domestic consumption. The agitation started by the industrial and commercial classes subsided when it was made known that the Government and the Federal Council would not accept the bill as reported by the committee and approved by the Agrarian majority. The compromise that the ministry made with the Agrarians surprised the country, leaving as it did some of the strongest protectionist features untouched. The concessions obtained from the Agrarians were the excision of the clause practically excluding all foreign meat after the end of 1903 and the permission for pickled meat to enter the country when its origin and the manner in which it has been preserved are known by ex-

rience to exclude all danger to health and when it is possible to bring satisfactory proof of its innocuous nature on its introduction into the country. It was further provided that the meat must be imported in pieces not less than 4 kilogrammes in weight. The prohibition of the import of canned meat and of sausages was retained, and the restrictions on the importation of fresh meat were not removed. The bill was passed on the third reading on May 23 by 163 votes to 123. As the bill affects the stock-raising and meat-exporting interests of the United States and Australia, the American and British governments made inquiries. Meat extracts were not included in the prohibition, though the Government has power to extend the application of the bill to them. The bill went into force on Oct. 1. The discriminations which attended the enforcement of former statutes had gone so far toward extinguishing the American trade in meat products with Germany that it was hoped that simpler methods of inspection under this act might even help to revive trade in the meats not prohibited.

A bill known as the *ler Heinze*, intended to regulate certain phases of public morality revealed in recent criminal trials, gave occasion to scenes of obstruction such as have not been witnessed in the Reichstag since the days of the *Kulturkampf*. The Clericals introduced amendments making the bill more stringent in regard to the exposure and sale of books and works of art of an objectionable character and the censorship and supervision of theatrical and other public amusements. The Conservatives supported the bill, the National Liberals also in principle, making a large majority in favor of the most puritanical restrictions. The Social Democrats, joined by the Radicals, declared an uncompromising opposition to the measure as placing restrictions on the freedom of art and of literature. Nearly the whole intellectual world of Germany, the leading representatives of letters, art, learning, and culture in Berlin, Munich, Leipsic, and other cities, and the general public opinion of the country sustained the Socialists in their resistance. Indignation meetings and signed remonstrances showed that the measure was regarded as an invasion of the most highly valued of German liberties. The majority was not deterred, however, from the determination to force it through, and the Clerical President of the Chamber, Graf Balles-trem, whose impartiality till then had won good opinions of all parties, strained the rules to aid its passage and thereby alienated the National Liberal supporters of the bill, enabling the Socialists to block it completely. As it was an amendment of the penal code, the calling of the roll could be demanded by 50 members. The Socialists called for a roll call on each separate clause, and by leaving the hall with the Radicals left the house without a quorum unless the majority parties were present in their full strength. When later the National Liberals joined them in these tactics they were able to prevent action at all times. The result was that the bill was withdrawn and another substituted, identical with the old one in the paragraphs dealing with immorality, but not containing the paragraphs affecting art and literature. This was passed rapidly through the house without opposition. A motion passed the Reichstag for the abolition of the dictatorship in Alsace-Lorraine, the execution of which rested, however, with the Government.

The new navy bill was presented in the beginning of February, 1900. The nonrecurring expenditure for construction and armament of new vessels was estimated at 1,600,000,000 marks and

for docks and harbors at 261,000,000 marks. Of the total sum it was proposed to raise 769,000,000 marks by loans spread over the sixteen years required for the completion of the new navy, while 1,092,000,000 marks will be met from the revenue. The recurring expenditure is expected to increase 5,400,000 marks each year during the period, rising from 140,800,000 marks in 1901 to 306,270,000 marks in 1916. The bill provides that supplies must be settled every year by the estimates, fixes a maximum which the naval expenditure of each year may not exceed, and retains the paragraph of the old naval bill which lays down the principle that expenditure on the navy shall not be met by increasing indirect taxes on articles consumed by the masses. The bill was supported by the Conservatives, though without enthusiasm, and by the National Liberals. The Clericals withheld their approval until they could learn how the financial means could be provided, as with disappearing surpluses and a cutting down of the amortization of debt the country was staggering under the demands for the former navy bill and army act of 1899. The Socialists were unanimous in their opposition to the bill. Enthusiasm for a navy in Germany has never been developed except among the manufacturing class, the shipowners, and exporters of the Hanse towns, and the colonial enthusiasts. The efforts of a navy league organized for the purpose of awakening an interest in the sea power of the country failed to influence the agricultural classes or to stir the vast bulk of the population living remote from the seaboard. The Clericals and the Conservatives of Agrarian tendencies thought that the trading and industrial classes ought to bear the whole cost of naval expansion, while the Social Democrats were of the opinion that, no matter how the cost might be met, it would cause an increase in the price of bread and other articles of popular consumption. The financial aspect of the question was the first and the principal subject of discussion, and on its solution depended the extent of the increase. The vote of the Clericals was not obtained until the amount of the proposed expenditure was cut down 390,000,000 marks by reducing the number of ships for foreign service. The Government insisted that two double squadrons were necessary, as the German fleet would have to maintain its superiority both in the Baltic and the North Sea. As amended by the budget committee, the navy bill, superseding the sexennate act of 1898, provides that the future strength of the navy shall be two double squadrons, each consisting of a flagship and 16 battle ships, 8 great and 24 small cruisers for service with the fleets, 3 great and 15 small cruisers for service on foreign stations, and a reserve of 4 battle ships and 4 great and 6 small cruisers. It is expected that the fleet will be brought up to the stipulated strength by the end of 1920. The Budget Committee reported in favor of fresh and increased taxation, although the Government had taken the ground that none would be necessary. A resolution from the Center restricted the amount to be raised by loans and enjoined the Government to use any surplus that might ensue from the new taxes in the reduction of debt. The stamp duty on lotteries was doubled, and a stamp duty of 1 per cent. on every mining share issued and of 0.1 per cent. on sales of mining shares was decreed. On the sale of other securities a transfer tax of 0.03 per cent. is levied. The import duty on foreign champagne was increased 50 per cent., that on foreign spirits 33½ per cent., and the protectionist principle was carried further by increasing the duty on foreign beer 50 per cent., affecting the Pilsen beer of Bohemia, which

is consumed enormously in northern Germany, and to a less extent English ale and porter. A stamp duty of 10 pfennigs was levied on bills of lading, trade between German ports being exempted. The navy bill passed the final reading as the last act of the session by the vote of 201 National Liberals, Moderate Radicals, Clericals, and Conservatives against 103 Social Democrats, Extreme Radicals, and South German Democrats, with 17 Clericals and 2 Conservatives.

After the prorogation of the Reichstag the crisis in China led to the organization of an expedition to the far East. The Emperor in his public utterances assumed for Germany a leading part in the political adjustment of the Chinese question since German activity in Shantung had precipitated the troubles and the German minister to China had paid for it with his life, and as Germany was willing to send out a powerful expedition the other powers accepted as commander in chief of the allied forces in the Chinese imperial province of Chih-Li, the German Field-Marshal Graf Waldersee. The strength of the expedition was 582 officers, 188 officials, 120 surgeons, and 18,712 men, with 5,579 horses, and the cost was estimated at 152,770,000 marks up to March 31, 1901. The Reichstag was not summoned to vote supplies as the Constitution requires, the Government presuming that the country approved the expedition and being unable to present preliminary estimates of sufficient accuracy. When the first soldiers departed the Emperor enjoined them to take no prisoners and give no quarter, and to make the name of German a terror in China that would be remembered like that of Attila and his Huns for a thousand years. Such vindictive utterances jarred on the ears of the public, and when soldiers wrote home about unmilitary barbarities appropriate to Huns, saying they were obeying the Emperor's orders, satirical strictures in the newspapers directed against the Emperor were plainer and sharper than they ever were before. The prosecutions for *lèse-majesté* multiplied at an alarming rate, and noted journalists were among the persons convicted. When the Reichstag met, the utterances and acts of the Emperor were openly discussed for the first time without the ministers or the president intervening to stop the discussion. The principle was asserted in the press and accepted in the Reichstag that when the Emperor acts as his own chancellor and takes the direction of affairs into his own hands the immunity of his acts from public or legislative discussion which custom hitherto prescribed must cease forthwith. Prince von Hohenlohe was absent and apparently had no part in shaping the Chinese policy of the Government, and before the autumn session of the Reichstag began he offered his resignation. The Emperor accepted it on Oct. 17, and appointed Graf Bülow to succeed him as German Imperial Chancellor, Prussian Minister President, and Minister of Foreign Affairs.

The new session was opened on Nov. 14. Among measures foreshadowed were one to regulate the legal status of sailors, a reform in the system of state insurance against accidents, fresh taxation of the wine trade, and a bill dealing with insurance companies. The long-pending difference between the German and United States governments regarding the right of American insurance companies to do business in Prussia had been amicably settled. The companies that formerly had their agencies in that country were expelled because they were foreign corporations which invested the money received for premiums elsewhere beyond German jurisdiction and supervision. Under the new arrangement they are required to keep a cer-

tain reserve in Germany, and the opportunity arose when the German Government required advances in September for the Chinese expedition for an advantageous investment in imperial treasury bonds which, owing to the tightness of the Berlin market, the Government disliked to offer in Germany because the best rates obtainable would compare unfavorably with the high showing for German public credit made when the last loan was emitted, and would furnish a bad precedent for future credit operations. Nevertheless there were bitter criticisms from Agrarians, Clericals, Radicals, and Socialists when the issue of 80,000,000 marks of treasury bonds was placed in the United States, thus demonstrating the financial difficulties of Germany at the very moment when a new development of German world politics was boastfully proclaimed.

Increased estimates for the Workmen's Insurance fund and for the defenses of the country were hinted at in the speech from the throne. The treasury statement made the estimate of expenditure for 1902 2,240,947,301 marks, 174,303,289 marks increase upon the estimate for the previous year. The estimated revenue is 2,137,192,606 marks, 103,754,695 marks less than the estimated income, the deficit to be met by a loan. The principal measure to be considered by the Reichstag was the new autonomous tariff, or general tariff, which is the scale of maximum duties to be levied on imports coming from countries that do not enjoy the most-favored-nation treatment, and is to be taken as the basis on which the new commercial treaties will be negotiated. In framing the new tariff the views of all the agricultural, industrial, and commercial interests have been carefully ascertained and considered, and the Minister of the Interior has been in constant consultation with experts. The provisional tariff agreement with England was continued by vote of the Reichstag for one year longer.

The Prussian Diet.—Although the ministry, in spite of the personal efforts of the Emperor-King, failed to obtain the assent of the Diet to the construction of a ship canal from the Rhine to the Elbe in 1899, the project was brought before the Diet again in 1900 and urged as a necessary measure for the relief of the state railroads and the development of inland commerce. The bill was even extended so as to include other proposed ship canals and the improvement of natural water ways in the interests of traffic and of the amelioration of land, notably a ship canal between Berlin and Stettin, the provision of a sufficient quantity of water in the Oder Bruch, the improvement of the state of the lower Oder, the Spree, and the Havel, the development of the water ways between the Oder and the Vistula, and a Masurian lake canal; also the deepening of the harbor of Emden for the accommodation of transatlantic steamers, so as to provide a German port for Westphalia. The Diet was asked further to vote considerable sums to extend and complete the railroad system. A special tax on great department stores was proposed, with the object of strengthening the position of the middle classes in commerce and industry. A store may deal in groceries, provisions, tobacco, and drugs; in dry goods and clothing; in household utensils, crockery, glass, and furniture; or in jewelry, fancy articles, art goods, stationery, tools and instruments, hardware, and arms. If its business is confined to one of these departments it pays no tax except the existing trade tax. Any firm or corporation doing a retail business combining two or more of these departments must pay an extra tax, varying in proportion to the extent of its turnover from 1½ per cent on sales

amounting to 500,000 marks a year up to 2 per cent. on 1,000,000 marks or over. The law is expected to prevent the extension of the system of department stores or to delay it until independent shopkeepers and small tradesmen have time to organize themselves better. Artisans and retailers may preserve their independence by means of a better technical and business education, by placing their workshops where they can make use of a common motor power, and thus employ artificial power more generally in their work by forming co-operative associations for the granting of credit and the purchase of raw materials, by dealing as far as possible on a cash basis, and perhaps by associating themselves together for the sale of their wares and establishing shops owned in common. The session of the Diet was opened on Jan. 9 and closed on June 19, having been prolonged by the difficulty that Dr. Miquel, the Minister of Finance, encountered in getting the consent of the Chamber of Deputies to the imposition of a special tax on the great retail stores having various departments.

GIFTS AND BEQUESTS. The following list comprises the most notable gifts and bequests for public purposes, of \$5,000 and upward in amount and value, that were made, became operative, or were completed in the United States in 1900. It excludes the ordinary denominational contributions for education and benevolent purposes, or State and municipal appropriations to public and sectarian institutions, and the grants of Congress for various measures of relief. It also excludes the contributions for the relief of the famine in British India, which exceeded \$250,000, and the cash gifts by individuals and corporations for the relief of the flood sufferers in Galveston, Texas, which, up to Nov. 10, were reported at \$1,253,710 and included \$27,907.02 contributed by the school children of New York city to the school children of Galveston. Beyond the specially noteworthy gifts, a striking feature of the benevolence of the citizens of the United States during the year was the large increase in the number of gifts and bequests. The known value of the gifts and bequests here enumerated exceeds \$47,500,000.

Adams, Julius, Boston, bequests to the Carney Hospital, \$25,000 outright and one fourth of his residuary estate conditionally.

Albright, John J., Buffalo, N. Y., gift to Smith College, Northampton, Mass., \$10,000.

Aldrich, J. B., Woonsocket, R. I., bequests to the Woonsocket Hospital, \$15,000; the Universalist church there, \$5,000.

Ancrum, John L., Asheville, N. C., bequests available on the death of his widow, to the Porter Military Academy, Charleston, S. C., \$15,000, and the Charleston Society for the Prevention of Cruelty to Animals, the residue of his estate, estimated at \$25,000.

Arnold, Olney, Pawtucket, R. I., bequest to Tufts College, \$5,000.

Atwater, Mrs. Caroline Swift, Poughkeepsie, N. Y., gift to Vassar College for its infirmary, \$12,000, doubling her gift of 1899.

Avery, Samuel Putnam, New York, gift to the New York Public Library, a collection of 17,000 prints, etchings, lithographs, and photographs, representing the labor of more than thirty years and a large expenditure of money.

Banker, Henrietta, Essex County, N. Y., bequests to the National American Woman's Suffrage Association and the town of Keene, in the Adirondacks, her residuary estate, which yielded each \$8,000.

Barber, O. C., Akron, Ohio, gift to the Akron City Hospital, to remove debt, \$100,000.

Barnard, Erastus A., Chicago, gift to the city for a public park, land valued at \$200,000.

Bartlett, A. C., Chicago, gift to Chicago University, for a physical culture hall, \$125,000.

Bates, Elizabeth H., Port Chester, N. Y., bequest to the University of Michigan, as allowed by surrogate, \$86,688. See her name in the record of 1899.

Belmont, August, New York, gift to the Cathedral of St. John the Divine, funds for a chapel to cost between \$150,000 and \$200,000.

Beloit College, Beloit, Wis., gifts from friends for permanent endowment, \$350,000.

Bennett, Joseph M., Philadelphia, bequests to the University of Pennsylvania and the Methodist Orphanage, nearly all of an estate estimated at \$2,000,000.

Bennett, Mrs. Margaret J., Baltimore, bequests to the Mount Vernon Place Methodist Church, \$30,000; Woman's College, Maryland Hospital for Women, Home for the Aged of the Methodist Episcopal Church, and the Patterson Memorial Association, each \$25,000; other institutions, \$22,000; Boys' Home Society, \$10,000; and to trustees for the founding of a Bennett Home for Deserving Women, \$150,000.

Billings, L. F., gift to Harvard University, \$5,000.

Blackstone, Timothy B., Chicago, bequests to the James Blackstone Memorial Library Association, Branford, Conn., \$100,000; and the Art Institute, Passavant Memorial Hospital, Chicago Relief and Aid Society, Chicago Orphan Asylum, Chicago Home for the Friendless, and St. Luke's Hospital, each \$25,000.

Boardman, Mrs. Lucy, New Haven, gift to Trinity Episcopal Church, property valued at \$65,000.

Bowen, Charles C., Detroit, bequest to Kalamazoo College for a Greek professorship, \$50,000.

Boyd, Edward, Cincinnati, bequest to St. Paul's Protestant Episcopal Church, \$10,000.

Boylston, Mrs. Josephine E., Newton, Mass., bequests to religious and charitable institutions, chiefly Congregational, an aggregate of \$9,000.

Bradford, George E., Gloucester, Mass., gift to the local Young Men's Christian Association, real estate valued at \$18,000.

Bradford, Prof. Vincent L., Philadelphia (died 1884), bequest to Washington and Lee University, made available by the death of his widow, his law library, collection of paintings, and half of his estate, estimated at over \$200,000.

Brenz, John D., Brooklyn, N. Y., bequests to institutions in New York and Italy, \$5,000; and to his executors the residue of his estate, valued at \$500,000, on the death of his sister, the income to be used to promote "charity or religion by the Protestant faith only."

Brigham, Robert Breck, Boston, bequests to nearly every charitable institution in Boston, an annuity of \$1,000, and to trustees the residue of his estate, estimated at \$3,000,000 to \$5,000,000, for the erection of a Hospital for Incurables.

Brodhead, Josephine, Washington, D. C., bequest to the town of South Newmarket, N. H., for a public library, \$10,000.

Bromley, Mrs. Isaac H., Norwich, Conn., gift to Yale University for a lectureship on public affairs, \$5,000.

Brookings, Robert S., and **Samuel S. Cupples**, St. Louis, Mo., joint gift to Washington University, the business property known as Cupples Station, paying nearly 10 per cent. on a stock capital of \$5,000,000.

Brooklyn (N. Y.), Children's Aid Society of, gift from two woman friends, names with-

held, an infants' hospital and beach pavilion, \$10,000.

Brooklyn (N. Y.) Institute, gift from friend, name withheld, \$5,000.

Brown, Harold, Newport, R. I. (died May 10, 1900), bequests to the Domestic and Foreign Missions of the United States of America, \$100,000; diocesan missions of Rhode Island, \$50,000; St. Colomba's Church, Middletown, R. I., \$50,000; and the Rhode Island Hospital, Newport Hospital, Brown University, and Emmanuel Church, Newport, each \$25,000.

Brown, John Nicholas, Newport, R. I. (died May 1, 1900), brother of **Harold**, bequests to the Butler Hospital, \$50,000; Rhode Island Hospital, \$54,000; Brown University, \$25,000 and his pledge of \$25,000; widows and orphans of Rhode Island Episcopal clergymen, \$50,000; Newport Hospital, \$8,000; Young Men's Christian Association of Providence, \$5,000; Episcopal Domestic and Foreign Missions, \$25,000; St. John's Church, Providence, \$10,000; Redwood Library, Newport, \$5,000; and \$150,000 for ground and building and \$500,000 for endowment of the Providence Public Library.

Brush, Miss Helen C., New York, bequest to the First Church of Christ, Scientist, \$62,000; will contested.

Bryson, Mrs. Eliza Tileston, New York, bequests to the Bryson Day Nursery and the New York Infirmary for Women and Children, each \$5,000; Teachers' College, New York, and St. Christina Home, Saratoga, each \$2,500.

Bucknell University, Lewisburg, Pa., gifts from friends, an aggregate of \$80,000, which secured gift of \$15,000 from John D. Rockefeller.

Bugbee, Edwin H., Putnam, Conn., bequest to the Danielson Free Library Association, his private library and \$15,000 for a library building.

Burt, Horace G., New York, gift to the University of Wyoming, a tract of 20 acres of land adjoining the university grounds.

Calderwood, Thomas, Clinton, Iowa, bequests for missionary work in Armenia and India, \$6,000; to institutions in Clinton, Council Bluffs, and Lyons, \$8,000.

Carleton, George H., Georgetown, Mass., bequests for a home for aged men and women, \$35,000; Perley Free School, \$5,000; other benevolent purposes, \$12,000.

Carnegie, Andrew, New York, gifts to the Carnegie Library and Institute in Pittsburgh, Pa., an addition of \$1,850,000 to the \$1,750,000 given in 1899 for the enlargement of the building; for the erection and endowment of a polytechnic institute in Pittsburgh, \$3,000,000; for public libraries in East Orange, N. J., York, Pa., and Hawick, Scotland, each \$50,000; for a library in Fort Dodge, Iowa, \$30,000; for libraries in Leavenworth, Kan., and Chillicothe, Mo., each \$25,000; to the Tuskegee Normal and Industrial Institute, \$20,000; and to Stevens Institute of Technology, \$15,000, supplementing a previous gift of \$50,000 for a new building.

Carr, A. Whitney, Jordan, N. Y., gift to the State of Iowa for free scholarships in the State University for deserving but poor boys, \$50,000.

Carruth, John G., Philadelphia, gift to the Dormitory fund of the University of Pennsylvania, \$20,000.

Casey, Margaret De Koven, New York, bequests to three institutions in Middletown, Conn., and New York city, \$7,000.

Cathedral of St. John the Divine, New York, gift from a friend, name withheld, for the choir fund, \$100,000.

Cheney, Mrs. Mary Robinson, gift to Yale University, to promote post-graduate work, \$5,000.

Chrisman, Mrs. Eliza, Topeka, Kan., bequests to the Ohio Wesleyan University, \$35,000; First Methodist Church, Topeka, \$5,000; Women's Missionary Society, Topeka, \$3,000; and nearly all the remainder of her estate of \$250,000 for the founding of a university of Topeka, contingent on the local Methodist churches raising a like amount within ten years.

Christian, Harry L., Brooklyn, N. Y., bequests to the Hans Christian Kindergarten, \$10,000; Norwegian Hospital, \$5,000.

Chute, Isaac S., Exeter, N. H., bequests to the Exeter Hospital, his valuable residence property; Congregational Home Missionary Society, \$5,000; Berea College, Hampton Normal Institute, Tuskegee Normal Institute, and the Methodist Episcopal Church, Exeter, each \$2,000; and the American Sunday School Union, American Missionary Association, American Baptist Missionary Union, and the American Board, the residue of his estate.

Clark, Jonas G., Worcester, Mass., bequests to Clark University, which he founded, for the library and a department of art, each \$100,000; also \$1,000,000 and the residue of his estate, providing the people of Worcester raise a fund of \$500,000 within three years. If a smaller sum only is raised his estate is to double it.

Cobb, Silas B., Chicago, bequests to Chicago Home for the Friendless, \$50,000; Orphan Asylum, \$25,000; Old People's Home and Young Men's Christian Association, each \$5,000; and American Sunday School Union, \$2,500.

Colorado College, Colorado Springs, gifts from friends, securing a promised gift of \$50,000 from Dr. D. K. Pearsons, \$150,000.

Columbia University, New York, gift from a friend, for the Library fund, \$10,000.

Cone, Albert G., Chicago, bequests to the Presbyterian Hospital, \$135,000; Chicago Home for Incurables, \$50,000; and Homœopathic Hospital, \$10,000.

Converse, E. S., and wife, Boston, gift to the Woman's Charity Club Hospital there, \$15,000.

Coram, Joseph A., Lowell, Mass., gift to Bates College, Lewiston, Me., for library building, \$20,000.

Corbin, Eli L., Oxford, N. Y., children of the late, gift to the village, a public library.

Crane, George F., and wife, New York, gift to St. Andrew's Episcopal Society at Washington, Mass., ground, chapel, and \$10,000 in bonds.

Crane, Mrs. Rachel B., Peekskill, N. Y., gift to the Boards of Home and Foreign Missions of the Presbyterian Church, each \$50,000.

Crapo, Philip M., Burlington, Iowa, gift to the new public library there, \$20,000.

Cudahy, Michael, Chicago, gift to the Catholic University of America, Washington, D. C., \$50,000.

Cupples, Samuel S. See **BROOKINGS, ROBERT S.**

Cutler, Isaac, Boston, gift to the town of Farmington, Me., for a public library, \$10,000.

Da Costa, Jacob M., M. D., Philadelphia, bequests to Pennsylvania Hospital, Children's Hospital, College of Physicians, and University of Pennsylvania, each \$5,000; Sunday Breakfast Association, \$1,000; Jefferson Medical College, his medical museum; and the College of Physicians, his medical library.

Davis, Moses M., Rome, N. Y., gift to the Christian Science church there, all his property, estimated at \$50,000.

De Koven, John, bequest to Yale University, \$68,152.

Denison University, Granville, Ohio, gifts from friends, about \$200,000, thus securing gift of John D. Rockefeller of \$100,000.

Dickson, Walter Scott, Salem, Mass., bequests to the city for the care of the chapel and conservatory in Greenlawn Cemetery presented by him, \$53,000; the Young Men's Christian Association, Salem Public Library, and Peabody Academy of Science, each \$10,000; four other institutions, each \$5,000; Tufts College, \$25,000 direct and \$20,000 in reversion; Salem Hospital, the reversion of \$30,000; Associated Charities of Salem, the reversion of \$50,000; and to other institutions, the reversion of \$100,000.

Dickinson Hospital, Northampton, Mass., gift to trustees from a friend, funds for an annex, to cost between \$15,000 and \$20,000.

Diehl, Rev. William, Brooklyn, N. Y., gift to his congregation, the German New Church property, valued at \$10,000.

Dixwell, Epes Sargent, Boston, bequests to the Cambridge Hospital and the Avon Home, each \$5,000; Boston Latin School Association, \$1,000.

Dodge, William Earl, New York, gift to Columbia University for the erection of a students' hall, to be under the control of the Young Men's Christian Association of New York city, \$100,000; to the Army Branch of the Young Men's Christian Association, on Governor's Island, a building, cost \$5,000; to Yale University, for the promotion of Christian citizenship, \$30,000.

Dortie, Henry T., New York city, bequests to the Society for the Prevention of Cruelty to Children, New York Eye and Ear Infirmary, New York Society for the Relief of Ruptured and Cripped, Holy Trinity Mission, Paris, France, St. Vincent de Paul French Orphan Asylum, New York, Manhattan Eye and Ear Hospital, St. Mary's Free Hospital for Children, New York, Kin and Cancer Hospital, New York Free Circulating Library, and the New York Home for Incurables, each \$3,000.

Drake, Ex-Gov. Francis Marion, Centerville, Iowa, gift to Drake University, Des Moines, named after him, \$32,500. He also made the university joint heir with his five children to his property, valued at \$3,000,000.

Dun, Robert Graham, New York, bequests to the Metropolitan Museum of Art, 25 paintings, valued at \$200,000; the Presbyterian, St. Luke's, and Mount Sinai Hospitals, and the New York Institution for the Instruction of the Deaf and dumb, each \$5,000.

Duncan, William, M. D., Savannah, Ga., bequests to the Savannah Hospital, \$1,500 at once, and the reversion of half of his estate, valued at \$0,000.

Dunlap, Juliana, Philadelphia, bequest to the Society of St. John the Evangelist (England) for religious work of its branch in the United States, the reversion of \$22,000.

Durand, Henry C., Lake Forest, Ill., gift to Lake Forest University, \$20,000.

Dutton, Mrs. Everett F., Sycamore, Ill., gift to the Sycamore Public Library, for a new building, \$5,000.

Dwight, Edmund, Boston, bequests to the Art Museum, two paintings by William M. Hunt and one by Washington Allston, and to Harvard University the reversion of \$125,000.

Dwight, John, New York, gift to Mount Holyoke College, for a memorial art building, \$60,000.

Eastman, George, Rochester, N. Y., gift to the Rochester Mechanics' Institute, \$200,000.

Eichler, Mrs. Marie, New York, bequests to seven institutions in New York, \$11,000, and two in Germany, \$5,250.

Ellwanger, George, Rochester, N. Y., gift to the German Protestant Church, for a home for the aged, real estate valued at \$15,000.

Emanu-El Sisterhood, New York, gifts from friends for a new building, \$75,000.

Ethical Culture, Society for, New York, gifts from three friends, names withheld, for new building fund, \$150,000.

Evans, Mrs. Mattie K., Philadelphia, bequests to charitable and religious institutions, \$20,000.

Fahnestock, Harris C., New York, gift to the New York Post-Graduate Medical School and Hospital, for a training school for nurses, real estate valued at \$65,000.

Flower, Ex-Gov. Roswell P., New York, widow and daughter (Mrs. Emma F. Taylor) of, joint gift to the Flower Hospital, \$200,000.

Ford, Jarvis, St. Joseph, Mo., bequests to trustees for a free library, \$20,000; and to the Municipal Hospital, \$10,000.

French, John, Brooklyn, N. Y., bequests to four local Methodist Episcopal institutions, each \$5,000; the Methodist Episcopal Hospital, the Brooklyn Church Society, and the Hanson Place Church, each the reversion of \$10,000; and six other institutions, the reversion of \$20,000.

French, John D. W., Boston, bequests to the Episcopal City Mission, Young Men's Christian Association, Church Home for Orphans, St. Luke's Home for Convalescents, Chapel of the Good Shepherd, and trustees of donations for the Protestant Episcopal Church, each \$10,000; Harvard University, Diocesan Board of Missions, Massachusetts Horticultural Society, and American Forestry Association, each \$5,000; and the Diocesan Board of Missions of Massachusetts, the residue of his estate.

Frick, Henry C., Pittsburg, gift to Wooster (Ohio) University, a library.

Furman, Mrs. Mary J., Nashville, Tenn., bequest to Vanderbilt University, her estate valued at \$200,000 to \$250,000.

Gallup, Mrs. Della, Chicago, gift to the University of Chicago, to endow the history library, \$30,000.

Gammell, Robert Ives and William, Providence, R. I., gifts to Brown University, each \$10,000.

Garcelon, Mrs. Caroline M., Oakland, Cal. (died in 1891), bequests to the city of Oakland, for a hospital, \$600,000, and to Bowdoin College, \$400,000, made available in 1900 by a decision of the United States Supreme Court.

Gardner, Mrs. John L., Boston, gift to the city, for a free museum, her new Italian palace in the Fens, with all its art contents, comprising costly paintings, sculptures, bronzes, metal work, tapestries, etc.

Gardner, Sarah E., Newport, R. I., bequest to the Rhode Island Society for the Prevention of Cruelty to Animals, \$50,000.

Garth, Mrs. John H., Hannibal, Mo., gift to the city, for a public library, \$25,000.

Gayley, James, class of '76, gift to Lafayette College, a chemical laboratory, cost \$30,000.

General Theological Seminary, New York, gift from alumni and others, Hoffman Memorial Hall, cost \$100,000.

Gibbs, Edward N., New York, bequest to Amherst College, \$10,000.

Gibbs, Miss Zela, New York, gift to the Cathedral of St. John the Divine, \$5,000.

Glover, Mrs. Louisa Cecelia, New York, bequests to St. Joseph's Theological Seminary, Yonkers, \$10,000; Institution of Mercy, \$4,000; Little Sisters of the Poor, \$2,000; other religious bodies, \$5,000.

Goddard, Chancellor William, Providence, R. I., gift to Brown University, \$25,000.

Goldstone, N. L., Des Moines, Iowa, bequests to local institutions, \$14,000.

Goldthorpe, William, Jo Daviess County, Ill., bequest to the Board of Education of the Methodist Episcopal Church, \$30,000.

Gould, Helen M., New York, gifts to the New York University for a Hall of Fame for Great Americans, \$100,000; to the Naval Branch of the Young Men's Christian Association for a building near the navy yard, Brooklyn, \$50,000; Berea (Ky.) College, \$5,000; and Hall of the Christ building fund, Chautauqua, \$5,000.

Greenwich (Conn.) Library, gift from friend, name withheld, \$10,000.

Grigson, Robert B., Boston, bequests to local charities and for the founding of a hospital for incurables, the reversion of an estate estimated at \$2,250,000.

Guggenheim, Meyer, and his sons, **Isaac, Daniel, Murray, Simon, Solomon B., and William**, New York, joint gift to Mount Sinai Hospital for a new building, \$200,000.

Gurley, W. F. E., Danville, Ill., gift to the University of Chicago, a paleontological collection of 700,000 specimens, personally gathered in the Mississippi Valley, valued at more than \$125,000.

Hahnemann Association, New England, gift to Boston University School of Medicine, \$7,000.

Hall, Seth B., Lowell, Mass., gift to the Fifth Street Baptist Church, \$5,000.

Halstead, John, New York, bequests to ten benevolent institutions a total of \$23,500, and to Cooper Union his residuary estate estimated at \$300,000.

Harding, Mrs. Julia A., Cambridge, Mass., bequests to Cambridge Hospital and Avon Place Home for Children, each \$20,000; Cambridge Associated Charities and Society for the Prevention of Cruelty to Children, each \$10,000; and the Congregational Church, Winoski Falls, Vt., Cambridge Home for Aged People, and Stearns Chapel, Cambridge, each \$5,000.

Harrison, Provost Charles C., Philadelphia, New Year's gift to the University of Pennsylvania, \$250,000.

Harvard University, gift from a friend, for the Architectural Building fund, \$20,000.

Havemeyer, Henry O., New York, gift to the town of Greenwich, Conn., a public school building, cost \$20,000.

Haverford College, Haverford, Pa., gifts from friends, to extend its religious instruction, \$65,000.

Hearn, George A., New York, gift to Ascension Memorial Church, five paintings, estimated value, \$50,000.

Hendrie, John W., Sound Beach, Conn., gifts to Yale University, \$5,000; Masonic Home, Wallingford, \$5,000; Episcopal Church, Riverside, \$5,000; and Congregational Church, Sound Beach, \$1,000.

Hennessey, Right Rev. John, Archbishop of Dubuque, Iowa, bequests to the fund for erecting a theological seminary in that city, \$50,000; to the Sisters of the Visitation a release from all encumbrances on their buildings held by him; and to the Sisters of the Holy Ghost, the Catholic University of America (Washington, D. C.), and the Dubuque Theological Seminary, an equal share in a residue aggregating \$500,000.

Higgins, Charles, Chicago, bequests to St. James's Protestant Episcopal Church, \$100,000; the bishop of the diocese of Chicago for poor churches, \$20,000; St. Luke's Hospital, \$10,000; Church Home for Aged Persons, \$5,000; and Grace Church, Waterford, N. Y., \$5,000.

Hogland, Mrs. Caroline C., New York, gift to the parish of St. Bartholomew's Protestant Episcopal Church, for the erection of a clinic building, \$100,000.

Holker, Abram, New Orleans, gift to the public library there, a valuable collection of books and \$10,000.

Houston, Walter, Utica, Wis., bequest to the Veterans' Home, Waupaca, Wis., \$12,000.

Howard, Samuel, Milwaukee, Wis., bequest to trustees for the support and education of orphans, \$200,000.

Howell, Benjamin Hunting, Brooklyn, N. Y., bequests to the South Third Street Presbyterian Church and the Industrial School Association, each \$5,000; Young Men's Christian Association and Eastern District Hospital and Dispensary, each \$2,500.

Hubbard, Gardiner Greene, Washington, D. C., heirs of, gift to the National Geographic Society, which he founded, funds for a building to cost \$40,000.

Hubbard, Thomas H., New York, gift to Bowdoin College, for a new library building, \$150,000.

Huntington, Charles Perit, Yonkers, N. Y., bequests to the Roosevelt Hospital, Five Points House of Industry, Children's Aid Society, New York Society for Relief of the Ruptured and Crippled, American Female Guardian Society (all of New York city), and the Free Library, Norwich, Conn., each \$20,000; and to the Cathedral of St. John the Divine, the residue of his estate, expected to yield the cathedral \$700,000.

Huntington, Collis Potter, New York, bequests to the Hampton Normal and Industrial Institute, \$100,000; Chapin Home for the Aged, \$25,000; the Metropolitan Museum of Art, the reversion of all his pictures.

Ingram, O. H., Eau Claire, Wis., gift to Ripon College, a hall for scientific study.

Iselin, Adrian, New Rochelle, N. Y., gift to that village, the entire shore front at the foot of Neptune Road, valued at \$30,000, on condition that the village establish a recreation pier there.

Jarvie, James N., Bloomfield, N. J., gift to Westminster Presbyterian Church, a building for Sunday school and free library, cost, equipped, \$100,000.

Jesup, Morris K., New York, gifts to Princeton University, \$25,000; and Yale University, the Landberg collection of Arabic manuscripts, cost \$20,000.

Johnson, John A., Madison, Wis., gift to the supervisors of Dane County, Wisconsin, for a home for aged people, \$40,000.

Johnson, William M., Hackensack, N. J., gift to the village, ground and a public library building, estimated cost \$40,000.

Juilliard, Mrs. Augustus D., New York, gift to St. John's Guild, for maintenance of the floating hospital she presented in 1899, \$50,000.

Justice, Jacob, Philadelphia, bequest for an unsectarian dispensary at Mount Pleasant, Pa., \$60,000.

Kent, Sidney A., Suffield, Conn., bequests to the University of Chicago and the Chicago Art Institute, each \$50,000.

Kimball, Laura C. F., Chicago, bequest to the American Female Guardian Society of New York, for the benefit of colored children, \$25,000.

Kleinert, Isaac B., New York, gift to the Hebrew Union College, Cincinnati, \$7,000.

Knight, Robert, Providence, R. I., gift to Brown University, \$25,000.

Kuhns, Mrs. Mary, Littlestown, Pa., gift to St. Aloysius's Church, for school, \$10,000.

Lamson, William, Le Roy, N. Y., bequest to Yale University, \$150,000.

Lee, Elliot C., gift to Harvard University, \$25,000.

- Lengel, Rev. Henry M.**, Reading, Pa., gift to his congregation, a new church edifice.
- Lewis, Mrs. Frederic Elliott**, New York, gift to St. John's Guild, a seaside cottage hospital, cost \$10,000.
- Lippincott, J. Dundas**, Philadelphia, gift to the University of Pennsylvania, \$20,000.
- Lisle, John**, Cold Spring Harbor, N. Y., bequests to the Methodist and Baptist churches there, \$1,500 direct and the reversion of \$20,000.
- Loomis, John Mason**, Chicago, bequest for the endowment of a Loomis Institute in Windsor, Conn., the reversion of the greater part of \$1,000,000. His brothers and sisters had previously joined him in an agreement to leave the residue of their estates for such an institution.
- Loring, Mary H.**, Newton, Mass., bequests to Newton College Hospital, \$5,000; three educational and industrial institutions, \$5,000; Home for Aged Females, all her real estate; and Perkins Institution for the Blind, Boston, the residue of her personal estate; contested.
- Loux, Cecelia Julia**, New York, bequests to Hebrew, German, and other institutions, \$16,400.
- McClary, William**, Philadelphia, gift to the Masonic Home of Pennsylvania, for the general use of the home and for the establishment of an orphanage, \$50,000.
- McFadden, Alexander**, Philadelphia, bequests to Dickinson College, \$10,000, and churches, hospitals, and charitable institutions, \$40,000.
- McKean, Mrs. Thomas**, Philadelphia, gift to the University of Pennsylvania, for the new Law School building, \$25,000.
- McLaughlin, Mrs. James**, Pittsburg, gift to Princeton University, United States bonds bearing an annual interest of \$300.
- McMahon, Monsignor James**, Washington, D. C., gift to the Catholic University of America, real estate valued at \$90,000, supplementing his previous gift of the Hall of Philosophy.
- Malcolm, Baroness Frederica**, London, England, bequest to "the School for the Revival of the Lost Mysteries of Antiquity, recently founded or about to be founded in America," \$25,000. Two Theosophist societies in New York claimed the bequest, and the claims are to be decided in the English courts.
- Massachusetts General Hospital**, Boston, gift from a friend, name withheld, for new outpatient building, \$75,000.
- Mather, Samuel**, Cleveland, Ohio, gift to the Lakeside Hospital there for a contagious disease ward, \$50,000.
- Mebarry, Mrs. Elizabeth**, Richmond, Ind., gift to Ohio Wesleyan University, for two new chairs, \$60,000.
- Milliken, James**, Decatur, Ill., gift, for an industrial college, to be a part of Lincoln University, \$100,000.
- Morgan, J. Pierpont**, New York, gift to the Metropolitan Museum of Art, three paintings—Piombo's Columbus, for which \$40,000 was paid; Hayden's Napoleon at St. Helena, and Lucy's Lord Nelson in the Cabin of the Victory; to the same, a collection of ancient Greek ornaments, valued at \$150,000.
- Mount Holyoke College**, South Hadley, Mass., gift from friends, to endow a chair of Philosophy, \$25,000.
- Nickerson, Samuel M.**, and wife, Chicago, gift to the Chicago Art Institute, their collections of paintings, engravings, Chinese and Japanese porcelains, jades, bronzes, and other art works, the whole valued at \$300,000.
- Norman, George H.**, Newport, R. I., bequests to the Rogers High School, \$10,000, and the Newport Hospital, Redwood Library, and Free Library of Newport, each \$5,000.
- Norton, the Misses**, Norwich, Conn., gift to the Kingfisher (Oklahoma) Congregational College, for a chapel, \$20,000.
- Oliver, Henry S.**, Pittsburg, gift to chemical laboratory, Lafayette College, \$5,000.
- Osborn, William**, Pittsburg, bequest to Oberlin College for endowment of the president's chair, \$40,000.
- Ottendorfer, Oswald**, New York city, bequests to the Isabella Heimath, \$100,000, supplementing a gift of like amount a few days before his death; American Museum of Natural History, \$25,000; New York Free Circulating Library, Charity Organization Society, Cooper Union, and German Hospital and Dispensary, each \$20,000; and Society for Ethical Culture and German Ladies' Society for the Relief of Destitute Widows and Orphans and Sick Persons, each \$10,000—in all, \$225,000.
- Pearsons, Daniel Kimball, M. D.**, Chicago, gifts, on fulfillment of specific conditions, to Mount Holyoke College, South Hadley, Mass.; Yankton (S. D.) College, Berea (Ky.) College, Colorado College, Colorado Springs; McKenzie College, Lebanon, Ill.; Grand Prairie College, Onarga, Ill.; Lake Forest University, Illinois; Carleton College, Northfield, Minn.; and two other institutions, the names of which and the amount of the gifts are to remain a secret during his lifetime, an aggregate of \$500,000, making the whole amount of his gifts to colleges in the past ten years about \$3,000,000.
- Perry, Marsden J.**, Providence, R. I., gift to Brown University, \$25,000.
- Phelps, Dodge & Co.**, New York, gift to Columbia University, for endowment of Schools of Mining and Metallurgy, \$10,000.
- Phipps, Henry**, Pittsburg, gift, chiefly for pupils of the public schools, a thoroughly equipped botanical school in Schenley Park.
- Phipps, Henry, Jr.**, Pittsburg, gift to the First Ward Public School of that city, for a boys' playground, a tract of land valued with improvements at \$100,000.
- Pierce, Moses**, Norwich, Conn., bequests to trustees the reversion of \$100,000 for the American Missionary Association, \$60,000 for the Manual Training School of the Norwich Free Academy, \$40,000 for the Associated Charities of Pawtucket, Central Falls, and Valley Falls, and \$20,000 for the Rock Nook Children's Home, Norwich.
- Pinchot, J. W.**, New York, wife and sons **Gifford** and **Amos**, gift to Yale University for endowment of the new School of Forestry, \$150,000.
- Plum, Stephen H.**, Newark, N. J., gift to the Day Nursery and Baby Shelter, a building, cost \$16,000.
- Presbyterian Hospital**, New York, gift from friend, name withheld, funds for erection of building for house staff and nurses, planned to cost \$200,000.
- Pringle, Samuel M.**, Poughkeepsie, N. Y., trustees of, having charge of a fund of \$250,000, decided to establish in that city a home for aged men who have had and lost fortunes.
- Quintard, George W.**, New York, gift to the University of the South, Suwanee, Tenn., for a memorial dormitory, \$50,000.
- Rew, Henry C.**, Newark, N. Y., gift to the village, a public library, cost \$20,000, and the salary of a librarian for a year.
- Rhoades, Mrs. Cornelia R.**, New York, bequests to St. Bartholomew's Protestant Episcopal Church and the Society for the Relief of the Destitute Blind, each \$10,000, and five church and benevolent societies, each \$1,000.

Rice, Mrs. Alice M., Worcester, Mass., bequests to Bowdoin College, \$25,000; Worcester Polytechnic Institute, direct \$5,000, in reversion \$5,000; Temporary Home and Day Nursery, direct \$10,000, in reversion \$10,000; Church of the Unity, \$10,000; and the residue of her estate, estimated at \$500,000, to Worcester Polytechnic Institute and Worcester Memorial Hospital in equal parts.

Ricker, Joseph, Portland, Me., bequests to the Maine Congregational Charitable Society, \$30,000; Bangor Theological Society and Maine Wesleyan Society, each \$25,000; Bowdoin College and Maine General Hospital, each \$20,000; Preacher's Aid Society, High Street Church, Portland, and Maine Missionary Society, each \$15,000; Home for Aged Women, Portland, Bates College, Home for Aged Men, Portland, and American Board of Commissioners for Foreign Missions, each \$10,000; Bible Society of Maine, Woman's Aid to American Missionary Association, Eye and Ear Infirmary, Portland, Martha Washington Society, Portland, Female Orphan Asylum, Portland, Portland Widows' Wood Society, American Missionary Association, New York, Congregational Church Building Society of New York, and Ancient Landmark Charity Fund of Portland, each \$5,000; Portland Seamen's Friend Society and Tuskegee (Ala.) Normal and Industrial Institute, each \$2,500; and other bequests to local societies, bringing the total up to about \$300,000.

Robinson, S., Boston, bequest to the town of Gilmanton, N. H., for improvement of the public roads, \$40,000.

Rochester Theological Seminary, gifts from friends, securing a like amount from John D. Rockefeller, \$100,000.

Rochester, (N. Y.), University of, gifts from friends, to secure admission of woman students, \$50,000.

Rockefeller, John D., New York, gifts to Spellman Seminary, Atlanta, Ga., \$180,000; Newton (Mass) Theological Seminary, \$150,000, conditional on a like amount being given by others; Brown University, Providence, R. I., on the raising of \$750,000 for endowment within a year, \$250,000; Denison University, Granville, Ohio, on condition that \$150,000 be raised elsewhere, \$100,000; Wellesley College, \$100,000; Baptist College, Des Moines, Iowa, \$50,000; Bucknell University, Lewisburg, Pa., \$15,000; University of Chicago, Christmas gift, \$1,500,000; also to the university a duplication of all gifts in 1900 up to \$500,000. Four years ago he promised to duplicate every gift up to \$2,000,000 that should be made by Jan. 1, 1900. The carrying out of this pledge and his special gifts during 1900 brought the total of his gifts to the university up to \$9,133,874. To Rochester Theological Seminary, on subscription by friends of a like amount, \$100,000.

Rogers, Jacob C., Boston, bequests to the Boarding House for Working Girls and the Groton School, each \$30,000; Massachusetts Society for the Promotion of Agriculture and the Massachusetts Humane Society, each \$25,000; Salem Fraternity and the House of the Good Samaritan, Boston, each \$20,000; and the Temporary Home for Working Women and the Widows' Home, both in Boston, each \$5,000.

Roome, Eleanor, Plainfield, N. J., bequests to 18 church and charitable institutions, a total of \$20,000.

Rouss, Charles Broadway, New York, gift, to city of Winchester, Va., for a city hall, \$30,000; to the city of New York, a bronze group representing Washington greeting Lafayette, by Bartholdi.

Royal, William C., Philadelphia, bequest to

the Woman's Branch of the Pennsylvania Society for the Prevention of Cruelty to Animals, \$50,000.

Ryan, Mrs. Thomas F., New York, gift to the Sisters of the Perpetual Adoration in Washington, D. C., a convent building costing \$100,000 on ground given in 1899.

Sarven, James D., Tarrytown, N. Y., bequest to the Tarrytown Hospital Association, \$3,000; Young Men's Lyceum there, \$1,000; and the Presbyterian Hospital, American Bible Society, St. Luke's Hospital, and the American Tract Society, each about \$50,000.

Sather, Mrs. Jane Krom, Oakland, Cal., gift to the University of California for a chair in Classical Literature, \$75,000, and for a book fund for the law library, property valued at \$25,000.

Sawyer, Philetus, Oshkosh, Wis., bequest to the Ladies' Benevolent Society there, \$10,000.

Sayles, Frank A., Providence, R. I., gift to Brown University, \$50,000.

Schell, Robert, New York, bequests to the New York Historical Society, the New York University, and the Presbyterian Hospital, each \$20,000; Rutgers College, \$10,000; and the New York Eye and Ear Infirmary, \$5,000.

Schermerhorn, William C., New York, gift to New York Eye and Ear Infirmary, for a new pavilion, \$75,000.

Schiff, Jacob J., New York, gift to Harvard University, \$10,000.

Schlesinger, Barthold, Brookline, Mass., bequests to educational and charitable institutions, an aggregate of \$14,000.

Schley, Mrs. Emma A., New York, bequests to the Brookside Cemetery, Watertown, N. Y., \$50,000; New York Medical College for Women, St. Thomas's Church, and the New York Protestant Episcopal Society, each \$10,000; and the Universalist Church, Watertown, \$6,000.

Schoenfeld, Max, formerly of Philadelphia, now of Rorschach, Switzerland, gift to the National Farm School, Doylestown, Pa., \$10,000.

Seibert, Samuel, Hagerstown, Md., bequests to the Lutheran Theological Seminary, Gettysburg, \$8,000; Pennsylvania College, \$4,000; other Lutheran institutions, \$3,000; and the Susquehanna Lutheran University, Selinsgrove, Pa., a residue of about \$10,000.

Severance, Lewis H., New York, gift to Oberlin College for the chemical laboratory, \$60,000.

Sewall, Arthur, Bath, Me., sons of the late, gift to the city for the poor, \$10,000, and to Maine General Hospital, \$5,000.

Sharpe, Andrew, Lawrence, Mass., bequests to various Baptist institutions, an aggregate of \$13,000.

Sherman, John, Mansfield, Ohio, bequests to Kenyon and Oberlin Colleges and the Sherman Heineken Park in Mansfield, each \$5,000.

Skeel, Mrs. Ann, New York, bequest to the American Unitarian Association of Boston, \$10,000.

Smith, Charles E., Philadelphia, bequests to the Academy of Natural Sciences, one sixth of estate of \$500,000 and a valuable collection of botanical books and dried plants; the Frank Institute, his large collection of books relating to iron, coal, general mining, railroads, and statistics.

Sound Beach, Conn., subscription of summer residents for a public high school (to cost \$12,000 more than \$5,000).

Sprague, Joseph W., Louisville, Ky., bequest to the United States Government for the Smithsonian Institution, the remote reversion \$250,000.

Spreckels, Claus, San Francisco, gift to the city, a public music stand in Golden Gate Park, cost \$100,000; dedicated Sept. 9.

Spring, John Rand, San Francisco, gift to the public library of Newburyport, Mass., \$20,000.

Stanford, Mrs. Leland, San Francisco, gift to the Roman Catholic diocese of Sacramento, the former family mansion in the latter city, for an orphanage, and an endowment of \$75,000.

Stanford, Mary E., Montclair, N. J., bequest to the Mountinside Hospital there, \$6,000.

Steel, Edward T., Philadelphia, daughters of the late, gift to the new high school, a memorial stained glass window, cost \$15,000.

Steele, A. B., Atlanta, Ga., gifts to the Methodist Orphans' Home and Agnes Scott Institute, both in Decatur, Ga., and the Home for the Friendless, in Atlanta, each \$5,000.

Steinert, Morris, New Haven, gift to Yale University, his collection of musical instruments and manuscripts, the former comprising about 500 separate pieces, many of them exceedingly rare.

Stevens, Frank S., Swansea, Mass., bequest to the town, a free public library, dedicated Sept. 19.

Stillman, James, New York, gift to Harvard University, \$50,000, doubling his gift of 1899 for students' hospital.

Stokes, the Misses, New York, joint gift to Yale University, Woodbridge Hall, for the administration, cost, \$60,000.

Sweetser, George D., New York, bequests to the American Board, Home Missionary Society, American Missionary Association, Congregational Church Building Society, and the Broadway Tabernacle, each \$20,000; and to 17 other institutions, each \$5,000.

Symmes, Caleb F., Worcester, Mass., bequests to twelve institutions, chiefly Congregational, each \$3,000.

Talbot, Mrs. Emily, Boston, bequest to Massachusetts Homœopathic Hospital, \$5,000.

Talcott, James, and wife, gift to Mount Holyoke College, for an arboretum, \$10,000.

Tallman, William G., Brooklyn, N. Y., bequests, available on the death of his widow, to Reformed Protestant Dutch Church on the Heights, \$5,000; Bethany Chapel, \$5,000; Memorial Chapel of Bethany Chapel, \$1,000; the Board of Foreign Missions of the Reformed Church of America, \$5,000; the Board of Domestic Missions of the same Church, \$5,000; Faith Home for Incurables, \$5,000; Brooklyn Home for Consumptives, \$5,000; Brooklyn Home for Aged Men, \$5,000; Brooklyn Bureau of Charities, \$1,000; Union for Christian Work, \$1,000; Brooklyn Association for Improving the Condition of the Poor, \$3,000; Brooklyn Children's Aid Society, \$1,000; Brooklyn Nursery, \$5,000; Brooklyn City Mission and Tract Society, \$5,000; and Brooklyn Society for the Relief of Respectable Aged Indigent Females, \$5,000.

Thompson, Jonathan, Woburn, Mass., bequests to the Burben Free Lecture fund, \$3,000; the city of Woburn for a free library, a plot of ground and his residuary estate.

Tilden, Dr. John Newell, Peekskill, N. Y., gift to the village, the old Henry Ward Beecher residence, fully equipped for a public library.

Tilton, Mrs. Caroline Stannard, New Orleans, gift to Tulane University, for a library building, \$5,000.

Turner, Elisha, Torrington, Conn., bequests to the Torrington Library Association, \$100,000; Third Congregational Church, \$12,000; Young Men's Christian Association, \$10,000; Connecticut Children's Aid Society and Congregational Home Missionary Society, each \$5,000; other institutions, \$9,000.

Turner, Mary Ann, Brooklyn, N. Y., bequests to ten institutions of the Methodist Episcopal Church, \$17,650.

Tuskegee (Ala.) Normal and Industrial Institute, gift from woman friend in Philadelphia, name withheld, \$5,000.

Van Wickle, Augustus, Hazleton, Pa., bequests to Princeton University, \$45,000; Brown University, \$45,000; Lafayette College, \$30,000.

Vassar College, Poughkeepsie, N. Y., gift from Boston alumnae, \$25,000, securing proffered gift of like amount, all for a biological laboratory.

Villard, Henry, New York, bequests to New York Infirmary for Women and Children and German Hospital and Dispensary, each \$10,000; German Society of New York, New York Medical College for Women, Dobb's Ferry Hospital, American Museum of Natural History, and Metropolitan Museum of Art, each \$5,000; three other institutions in New York, each \$2,500; and to Columbia and Harvard Universities, unrestricted, each \$50,000.

Voorhees, Gov. Foster M., Trenton, N. J., gift to the Board of Foreign Missions, Reformed Church of America, \$9,000.

Voorhees, Randolph, Clinton, N. J., gift to the Dutch Reformed Theological Seminary, New Brunswick, N. J., \$25,000.

Wadsworth, Herbert and William A., joint gift to Harvard University, \$26,500.

Wain, Sally M., Philadelphia, bequests to the Domestic and Foreign Missionary Societies of the Protestant Episcopal Church, Board of Missions of the Diocese of Pennsylvania, Bishop White Prayer Book Society, Union Benevolent Association, and the Pennsylvania Training School for Feeble-minded Children, each \$5,000; the Pennsylvania Society for the Prevention of Cruelty to Animals, \$6,000; and the Society for the Increase of the Ministry, \$3,000.

Walker, George Leon, D.D., Hartford, Conn., bequests to Connecticut church societies, \$7,000.

Walker, James, Wilmington, N. C., gift to the city, a hospital building, cost \$30,000.

Wallace, Rodney, Fitchburg, Mass., gift to Smith College, Northampton, Mass., \$20,000.

Warner, Ezra J., Chicago, gift to Middlebury (Vt.) College for a science hall, \$20,000, supplementing a previous gift for the same purpose of \$50,000.

Wellesley College, gifts from friends, names withheld, for endowment of chair of Biblical History and Literature and the Kimball professorship of Art, each \$50,000; to Gymnasium fund, \$5,000.

Wells, David Ames, Norwich, Conn. (died 1898), bequests made available by the death of his son **David Dwight Wells**, to Harvard University, Williams College, and the City Library, Springfield, Mass., each \$37,000.

Westinghouse Company, through Walter C. Kerr, gift to Cornell University, a complete outfit of the Parsons turbine, costing \$6,500.

Wharton, John, Newark, N. J., bequests to the Mission Boards of the Reformed Church, each \$2,500.

Whitin, Mrs. John C., Whitinsville, Mass., gift to Wellesley College, a fully equipped astronomical observatory.

Whitney, David, Detroit, Mich., bequests to Alma and Olivet Colleges, each \$5,000.

Whittington, Jacob Craft, formerly of Baltimore, Md., bequest to Baltimore Association for Improvement of the Poor, \$40,000.

Wickes, William W., New York, bequests to the Boards of Home and Foreign Missions of the Presbyterian Church, each \$10,000; the Boards of Education, Ministerial Relief, and Aid for Colleges of that Church, American Female Guardian Society, and Brooklyn Home for Aged Men, each \$5,000; other institutions, \$8,000.

Widener, Peter A. B., Philadelphia, gift to the city for a memorial library, his costly residence and its contents.

Wilson, Myron H., Chicago, gift to the Northwestern University Settlement, for the erection of a new hall, \$50,000.

Wilson, Thomas, Cleveland, Ohio, bequest, funds for establishment of a home for aged couples, preferably sailors and their wives.

Wolcott, ex-Gov. **Roger**, Boston, bequests to Harvard University, \$20,000; Massachusetts General Hospital and Boston Museum of Fine Arts, each \$5,000; Milton Public Library, \$2,000; Hampton Normal and Industrial Institute, Tuskegee Normal and Industrial Institute, and Wolcott Library, Litchfield, Conn., each \$1,000.

Wolff, Abraham, New York, bequests to the United Hebrew Charities, \$10,000; Mount Sinai Hospital, \$10,000; Montefiore Home for Chronic Invalids, \$10,000; Home for Aged and Infirm Hebrews, \$5,000; New York Cancer Hospital, \$5,000; and other institutions an aggregate of \$10,000.

Woodford, Stewart L., Brooklyn, N. Y., gift to Berkeley Institute, for three scholarships, \$9,000.

Woolsey, William, Belair, Md. (died in 1888), bequest to the authorities of Harford County for improvement of its public roads, the reversion of \$58,000, released by the death of Miss Rebecca Woolsey in 1900.

Yankton (S. D.) College, gifts from friends, \$30,000, securing gift from Dr. Daniel K. Pearsons, of Chicago, of \$50,000.

Young, Harriet B., Charlestown, Ind., bequests to Presbyterian missionary and benevolent societies, an aggregate of \$16,000.

Young Men's Christian Association, Hyde Park, Mass., gift from a friend, for building fund, \$25,000.

Young Men's Christian Association, New Haven, Conn., gifts from friends for auditorium, \$35,000.

GOLD NUGGETS. The important discoveries of gold in the past century began in 1848, in California. Three years later those in Australia followed, a few years afterward those in British Columbia, and those of Colorado in 1858-'59. Those of the Transvaal were made principally in 1886. Gold was discovered at various places in Alaska in 1882-'94, and the first claim in the Klondike was located in August, 1896.

Australia.—Australia has been found richer than any other part of the world in gold nuggets. The colony of Victoria has yielded the greatest number, and New South Wales the largest one recorded. This monster nugget, found at Hill End, was 4 feet 9 inches by 3 feet 3 inches, averaging 4 inches in thickness, and \$148,000 was paid for it to the finders, Messrs. Byer and Haltman. Just previously they had so exhausted their resources as to be obliged to live on charity, and this rich find is said to have unfitted one of them for work for a long time thereafter.

At Bakery Hill, Ballarat, Victoria, June 15, 1858, a party of 24 found the Welcome nugget, and sold it for \$52,000 in Ballarat. It was exhibited in Melbourne, and was sold again for \$46,625. The Welcome was found at a depth of 180 feet, was water worn, and contained 10 pounds of quartz, clay, and oxide of iron. It measured 20 inches by 12 inches by 7 inches, and when melted in London, in November, 1859, it yielded 99.20 per cent. of pure gold. Three years before the finding of the Welcome a nugget of 480 ounces and one of 571 ounces were discovered very near the same spot. Canadian Gully has an interesting record. In it two new miners, working with

two others, found a nugget of 76 ounces, and immediately after, digging to a depth of 60 feet, they took out a nugget weighing 1,619 ounces, which they took to England and sold for \$27,600. The Lady Hotham, weighing 1,177 ounces 9 pennyweights, was also found at a depth of 60 feet, when the earth about it had been yielding one ounce of gold to the ton. Also a beautiful pyramidal nugget came to light not ten feet from the point where the 1,619 ounce nugget had been discovered. In the year 1853 a nugget of 371 ounces 2 pennyweights, worth \$1,327, one of 368 ounces, and one of 143 ounces 15 pennyweights were taken from the same gully. Near this gully a nugget of 1,117 ounces 17 pennyweights was discovered in 1855, and smaller ones to the amount of 220 pounds, so that the claim yielded \$65,000. In the Indicator vein in the Ballarat group was found, about 1870, a remarkable pendant of pure gold. It consisted of a golden wire about 4 feet long, hung at intervals with lumps of gold about as large as an egg. It was found at a depth of 250 feet, and was worth \$7,500.

Other nuggets found at Ballarat are: At Eureka, in an abandoned hole, one of 625 ounces, and in 1857, near Native Youth, at a depth of 9 feet, the Nil Desperandum, 540 ounces. Also there was found at Ballarat in 1860, at a depth of 400 feet, a solid lump of gold weighing 834 ounces, and in 1861 a 48-ounce nugget is recorded, taken from the Pinchgut Gully.

The Welcome Stranger is a famous Australian nugget. It was discovered in the rut made by a peddler's cart, for it had been but barely covered with loose loam. The nugget measured 10 by 10 inches, weighed 2,230 ounces, and contained 98.5 per cent. of gold. The value was \$47,670. It was found Feb. 15, 1869, at Moliagul, near Dunolly, where prospecting had but just begun. Heavy gold and many large nuggets were found in that region. Among these were the Schlemm, 478 ounces, the Spondulix, 130 ounces, one of 110 ounces 9 pennyweights, which was found in 1854, and two nuggets unearthed soon after the Welcome Stranger at nearly the same spot, of 114 ounces and 36 ounces respectively.

Kingower yielded the Blanche Barkley, a nugget of 1,743 ounces 13 pennyweights, which lay buried at a depth of 15 feet. It was taken to Melbourne and was exhibited there, and also at the Crystal Palace, London, where it proved very interesting to the public and netted the owners \$250 a week. It contained 95.58 per cent. pure gold and was valued at \$34,525. Also at Kingower was found a nugget of 805 ounces, one of 782 ounces, one of 282 ounces 2 pennyweights in 1854, one of 260 ounces in 1856, and one of 236 ounces in 1858. In the last-named year a moss-covered nugget was picked up by a party of prospectors. A nugget of 120 ounces, lying but a few inches below the surface, was dug up by a boy in the same locality in 1858. Nuggets of 106 ounces 16 pennyweights and 100½ ounces were found at Kingower in 1861. The McIntyre diggings, near that place, a nugget weighing 810 ounces was discovered in 1857, a nugget of 452 ounces in 1870, and in the year 1858 one weighing 300 ounces was taken from under six feet of soil.

Besides the large nuggets already mentioned, Australia has produced several others weighing more than 1,000 ounces. These are: The Precious, 1,621 ounces; the Viscount Canterbury, 1,105 ounces; the Heron, 1,108 ounces; one from Berlin weighing 1,121 ounces; and one from Lasman's lead of 1,034 ounces 5 pennyweights. The Precious was found Jan. 5, 1871, a year in which Berlin generously yielded nuggets, two others being

the Kum Tow, 719 ounces, and the Needful, 247 ounces. The following year one of 477 ounces was found there. The Viscount and Viscountess Canbury also came from Berlin. The latter weighed 34 ounces. They were found in 1869. In the same year, one of 893 ounces was discovered at Berlin, and in 1870 one of 896 ounces, and in 1872 as found the Crescent, 179 ounces.

The Heron, a solid lump of gold, weighing 1,008 ounces, worth \$20,400, was found near Old Golden Point, Fryer's Creek, Mount Alexander, where also nuggets of 264 ounces, 22 ounces, and 84 ounces had been found. The Victorian nugget was found in 1852 in White Horse Gully, Sandhurst; it weighed 10 ounces. Parliament bought it for \$8,250 and presented it to the Queen. In the same hole also, in 1852, was found a nugget of 573 ounces, valued at \$10,500, and near by, imbedded a foot deep in gravel, the Dascombe nugget was found in the same place. Robinson Crusoe Gully, Sandhurst, yielded a nugget of 377 ounces 6 pennyweights. Also at Sandhurst, in 1852, one of 288 ounces was found. Another Australian nugget was presented to the Queen in 1858. It weighed 146 pounds.

In West Australia, in 1899, a singular nugget of 10 pounds was found as the result of a vision. A priest was told by a poor, devout parishioner that he had miraculously learned of the whereabouts of the nugget. He followed the directions and dug up a lump of gold which from its shape he named the "Sacred and Golden Sickle."

Other Australian nuggets, with the place where and the year (when recorded), are the following:

Daisy Hill (1855), at a depth of 3½ feet, 715 ounces.

McIvor (1858), 658 ounces.

Back Creek, Taradale, at a depth of 12 feet, 648 ounces.

McIvor (1855), 645 ounces.

Midas mine, Cheswick (1887), the Lady Loch, 10 ounces.

Yandoit, Castlemain (1860), value \$10,000, 600 ounces.

Ironback (1880), 461 ounces.

Twisted Gum Tree, 408 ounces.

Yandoit, Castlemain (1860), at a depth of 16 feet, 384 ounces.

McIvor (1857), 328 ounces.

McCallum's Creek, 326 ounces 10 pennyweights.

Jones's Creek (1856), 281 ounces.

Daisy Hill (1856), 275 ounces 3 pennyweights 18 lines.

Brown's Diggings (1856), 263 ounces 8 pennyweights.

Mount Blackwood (1855), found on the surface of the ground, 240 ounces.

Yandoit (1860), about 20 feet deep, 240 ounces.

Mount Korong (1856), at a depth of 18 inches, value \$5,000, 235 ounces 13 pennyweights.

Mount Korong (1854), 192 ounces.

Tryant's Ranges (1854), 183 ounces 8 pennyweights 12 grains.

Arrangower (1855), 180 ounces.

Jones's Gully (1861), 153½ ounces.

Jones's Creek, Mount Moliagul (1855), 145 ounces 5 pennyweights.

Cheswick Creek (1860), 144 ounces.

Blackwood (1889), 142 ounces.

Jones's Creek, Mount Moliagul (1855), 140 ounces.

Bokewood, Break-of-Day claim (1898), 138 ounces.

Iron Crow (1858), 136 ounces.

Mount Korong, at a depth of 4½ feet, 132 ounces 10 pennyweights.

Blue Gully (1898), 127 ounces.

Mount Moliagul (1857), value \$2,000, 104 ounces 8 pennyweights.

Bokewood, 54 ounces.

Five others were taken from Yandoit, the Lady Brassey from the Midas mine, Cheswick, and small nuggets to the amount of 80 ounces from Back Creek, Taradale, and many others have been found on various Australian gold fields, from 20 ounces to 200.

Eldorado County was the scene of the first gold discovery in California. A little nugget was found by James W. Marshall and Peter Winner in 1848. It was about the size of a Lima bean, but it excited the whole country, and began that great stream of emigration which flowed westward for several years thereafter. In the beginning of California prospecting, nuggets as large as eggs were often found, and occasionally some twice that size. The largest nugget California ever yielded weighed 80 pounds. Two drunken fellows were crossing the Grizzly mountains to Camp Corona in 1854, when, on the night of Nov. 17, a heavy rain fell. They sought shelter in a deserted hut, but before morning the water carried them away, and one was drowned. On the following morning, the other, Oliver Martin, was beginning to dig a grave for his companion when he unearthed the nugget. He secured help, and carried it to Camp Corona, exhibited it in various parts of the country, from which he realized \$10,000, and sold it for \$22,700. Never after that did Martin touch liquor, for the fortunate escape and the fortunate find seemed to him an act of Providence. With his providential capital he began businesslike mining, and when he died, in New Orleans, he left more than a million dollars. Eldorado County yielded not only the first California nugget, but the first large one. This weighed 121 ounces, and was dug from the bank of American river in 1850. Also in 1850 was found, in French Ravine, Calaveras County, a nugget of 263 ounces, worth \$4,893. The same ravine, in the year following, yielded one worth \$8,000. From the Sailor Diggings, Downieville, Eldorado County, also in 1851, a party of English sailors found a 31-pound nugget, and several others from 5 to 15 pounds, which they exhibited in England.

In 1852 a nugget of 45 pounds was found in Tuolumne County. A consumptive friend of the finder brought it East to exhibit it, and gave lectures on mining in California. For a time the miner failed to hear from him, when one day news came of his death, and that the nugget was deposited in a bank for the owner. It yielded \$8,000 worth of gold.

In 1853 a nugget of 330 ounces, worth \$5,025, was found at Columbus, Tuolumne County.

In 1854, on Sullivan's Creek, Eldorado County, one of 28 pounds, worth \$7,168, was found.

In 1855, French Ravine yielded one worth \$10,000.

In 1856, at Remington Hill, Nevada County, half of a worn boulder of gold quartz was found, worth \$4,672.50. Two years later a hired man engaged at the mine suddenly told his employers he was going to leave. One of them suspected that the other half of the boulder had come to light, so mounted his horse and went in pursuit, to find his surmise correct and return \$4,430.75 the richer for his ride.

In 1858, a boy named Perkins, playing with a toy water wheel in a worked-over mountain stream in Calaveras County, came upon a nugget that yielded \$1,800.

In 1859, near Butcher's Ranch, Placer County, a nugget of 20 pounds brought the finder \$3,264. The same man in the same mine found, years later, one of 147 ounces, worth \$2,852.

In 1861 California's second largest nugget was found (65 pounds). A half-breed Indian discovered it in Nevada County, lying in the bed of a stream in which he was washing his overalls. The mine owners sold it for \$17,400, and presented \$100 to each of their employees, with \$300 extra to the finder. In 1864, near Michigan Bluff, Placer County, a lump of pure gold of 226 ounces was found, of the value of \$4,204.

In 1867, near Gibsonville, Calaveras County, a nugget of over 100 ounces, worth \$1,700, was found.

In 1868, on Table mountain, Tuolumne County, on his way to prospect a certain place, a colored man saw the corner of a nugget. He dug it up and buried it in another spot, which he marked. Then he proceeded to his destination, where he found such good diggings that he remained several weeks. When he returned for his nugget he found a company of Italians at work but 10 feet away from it. He explained the situation, and was permitted to take away his treasure, which weighed 35 pounds and brought him \$7,000.

In 1869, in Sierra County, a nugget was found in the Monumental claim, and was widely exhibited. It weighed 132 pounds, and realized \$9,800.

In 1870, in Shasta County, a Frenchman picked up a nugget worth \$6,200.

In 1874, in Alpine County, a solid lump of gold was discovered. Henry E. Ellis went there to live in the mountains. Mrs. Ellis was driving home their cow, and picked up a stone to throw for the amusement of her dog. It was heavy, and she sold her find for \$2,250. It was exhibited at the World's Fair in Chicago.

In 1876, in Placer County, a white quartz bowl-der yielding \$5,700 worth of gold was found.

In 1880, on Flat Creek, Shasta County, a nugget worth \$520 was found.

Other California nuggets recorded, but without a date, are: From Calaveras County, one of 266 ounces, worth \$2,800; at Elizabethtown, one worth \$2,600; at Mohawk valley, one of 420 ounces, worth \$6,700; and at Ruby Belle camp, one worth \$9,000. From Nevada County, near Dutch Flats, a nugget worth \$12,300. From Eldorado County, at Gold Hill, one of 380 ounces, worth \$6,500; near Knapp Ranch, one of 50 pounds, worth \$8,500. At Spring Gulch an almost pure gold nugget was found by a Frenchman, whose lucky find made him insane the following day. The value of the nugget (\$5,000) was sent across the ocean to his family.

Colorado's largest nugget, "Tom's Baby," was found in the Gold Flake mine, Summit County, July 23, 1877. It weighed 13 pounds. The only other nugget recorded was found in the crop of a turkey in Denver, in January, 1900, and was worth about a dollar.

North Carolina boasts the mining claim that has produced more nuggets than any other single claim in the world—the Reed mine, Cabarrus County. The weights of these are 28 pounds, 22 pounds, 17 pounds, 16 pounds, 13½ pounds, 9½ pounds, two 9 pounds, two 8 pounds, 5 pounds, 3½ pounds, two 2 pounds, and 1½ pound (\$60,000 worth in all), and a peck of golden beans and peas. A slave made the first discovery on this claim, and a slave also found the 17-pound and the 16-pound nuggets. A claim near Albemarle, Stanley County, is the next richest; nuggets of 10½ pounds, 8½ pounds, 5½ pounds, 3 pounds, a dozen of 1 pound, and 2 quarts of smaller pieces are among the finds. A 4-pound and a 2-pound nugget were found at the Sam Christian mine, Montgomery County. A 10-pound nugget was found at the Crawford mine, Stanley County, in 1895, and also in the same year at the same mine one of 8 pounds 5 ounces.

Nevada has not been very rich in large nuggets; the largest was taken from the Osceola mine about 1880. Its weight was 24 pounds, its value \$4,000. It was stolen, but the thief repented a few months later returned \$2,000—all that was left. The same mine in 1899 yielded a nugget worth \$2,190.

Montana sent to the Paris Exposition a collection of nuggets worth \$12,000; the largest weighed 5 pounds, and is worth \$1,050. Nearly 100 specimens were exhibited, including a beautiful one of 48 ounces, worth \$1,000, and 3 from 45 ounces to 20 ounces, several more above 10 ounces, a dozen above 2 ounces, and 38 of 1 ounce. Montana's largest nugget came from Snowshoe Gulch, Little Blackfoot river. It was found at a depth of 4 feet, and realized \$3,356. Confederate Gulch, near Diamond, in 1890 was yielding nuggets worth \$1 an ounce, and one of these was worth \$29.

Arizona has produced but few nuggets. In 1880 Papago Indians found one worth \$900 in Horn shoe Basin, Quijoroa mountains, 50 miles south of Tucson, and many smaller nuggets have been found.

New Mexico produced, several years ago, a nugget worth \$1,300, and the old Spanish prospectors found large nuggets.

Mexico has been exhibiting in New York City the largest nugget of pure gold found in the past fifteen years. It was discovered in the San Mateo mountains of Chihuahua, weighs 468 ounces, and is worth \$8,430. A poor peon found it on a mining company's property, and received \$1,000 as a reward. A singular nugget, bought from an Indian, was presumably from Mexico. It was 1½ inches long by ¾ inch wide, 19 carats fine, of a beautiful color, and in shape a perfect miniature corn husk.

Though South America has undoubtedly produced a great quantity of nuggets in the past two hundred years, reliable information about them is not to be had, except in a single instance. A nugget of 60 pounds was found at La Paz, Peru, in 1730.

The Klondike has produced no large nuggets; the most important weighed but 34 ounces. The largest was found on Eldorado Creek, and was worth \$5,000. The Yukon's largest nugget was found in 1889 on Eldorado Creek, and weighed 72 ounces; its value was \$1,158.

The important British America nuggets are: One of 84 ounces, found on Spruce Creek in June 1899, value \$1,000; one of 52 ounces, found on Cloutier river, Quebec, in 1866; also on the same river one of 45 ounces; one of 29 ounces 12 pennyweight 17 grains, worth \$600; and a nugget found at De la Croix Creek, worth \$61. The 52-ounce nugget found on Gilbert river was discovered by a little girl, Clotilde Gilbert. Her father sent her to the river for a horse one Sunday morning to go to mass, and when she was crossing the ford in the stream she saw this nugget in the sand.

Of the South African nuggets we have the following record: At Pilgrim's Rest were found several 4-pound nuggets, and one of more than 10 pounds, which was an exact model of the human hand. It was exhibited at the Philadelphia Centennial Exposition. On Frazier's Hill nuggets from 2 to 3 pounds were found. Upper Pilgrim Creek yielded nuggets from 4 to 5 pounds, which brought \$19.50 an ounce.

Siberia's largest nugget was the "Ural," found in the mountains of that name, worth \$24,000. Three convicts found a still more valuable one (\$30,000), and the Czar gave them their liberty, though he kept all the gold for himself. The "Tzar" was found in 1882 in the Tzar Alexander mine. Its value was \$11,000. And it is recorded

that recently a nugget was found at Orsk, weighing 1,150 ounces.

With regard to the gold fields of Japan, no particulars are officially given.

We find information of two French nuggets found near the Ardèche. A shepherd picked up one to throw at some goats, and next day his brother found it, took it to a jeweler, and received 200 francs for it. One of 543 grammes was turned up by a farmer's hoe about the year 1870. Smaller nuggets are said by the village priest to have been found frequently in the vicinity during the past sixty years.

See Famous Gold Nuggets of the World, by Thomas Jefferson Hurley, of the American Institute of Mining Engineers (New York, printed privately, 1900), to which we are indebted for the formation in this article.

GREAT BRITAIN AND IRELAND, a monarchy in western Europe, formed by the union of the Kingdom of England and the Principality of Wales with the Kingdom of Scotland, constituting together the Kingdom of Great Britain, and of this with the Kingdom of Ireland, the whole forming the United Kingdom of Great Britain and Ireland, which holds supreme dominion over the Empire of India and colonies and dependencies of various kinds—self-governing colonies, colonies governed and administered partly wholly by the Crown, and protectorates under native laws and rulers—constituting, with the United Kingdom, the British Empire. The reigning sovereign in 1900 was the Queen-Empress Victoria, born May 24, 1819, died Jan. 22, 1901, the daughter of Edward, Duke of Kent, the fourth son of George III. The successor to the throne is Albert Edward, Prince of Wales, born Nov. 9, 1841, eldest son of Queen Victoria and the Prince Consort Albert, Duke of Saxe-Coburg-Gotha. George, Duke of York, born June 3, 1865, the only living son of the Prince of Wales and Princess Alexandra of Denmark, is next in succession, and after him the eldest son, Albert Edward, born June 23, 1894, due of his marriage with Victoria May, daughter of the Duke of Teck.

The power to legislate for the United Kingdom and for all parts of the British Empire, except so far as it is delegated to local legislative authorities, is vested in the British Parliament, consisting of a House of Lords and a House of Commons. Members of the House of Lords are princes of the blood royal; spiritual lords, which are the metropolitan bishops of ancient English sees; hereditary peers of England, of Great Britain, and of the United Kingdom; representative peers of Scotland, elected by their fellows for the duration of Parliament, and of Ireland, elected for life; and life peers and law lords, created by the sovereign by advice of the Cabinet. The number of peers on the roll in 1899 was 591. The House of Commons contains 670 members, of whom 253 represent the county constituencies, 237 the boroughs, and 5 the universities of England; 39 the county constituencies, 31 the boroughs, and 2 the universities of Scotland; 185 the county constituencies, 16 the boroughs, and 2 the universities of Ireland. The franchise is possessed by all male householders and lodgers of full age, about 1 in 6 of the population; the number of electors registered in 1899 was 6,000,283, of whom 5,208,137 were in England, 671,128 in Scotland, and 721,018 in Ireland. The duration of Parliament, unless it is previously dissolved, is seven years. The Committee of Ministers, called the Cabinet, representing the majority for the time being in the House of Commons, exercises in fact the executive authority in the United

Kingdom and the British Empire that is nominally vested in the Crown. The Prime Minister chooses his colleagues and dispenses the patronage of the Crown; he initiates the policy of the Government or approves the measures suggested by the other ministers in their several departments, and when his policy or his acts encounter the displeasure of Parliament, manifested by an adverse vote on a Cabinet question or by a direct vote of censure, he either resigns forthwith, in company with the rest of the Cabinet, or appeals to the country by dissolving Parliament and ordering new elections. When a Cabinet resigns the retiring Prime Minister advises the Queen as to the selection of the statesman most competent to form a new Government, usually the leader of the Opposition in the House of Commons. The Cabinet formed on June 25, 1895, by Lord Salisbury, consisted in the beginning of 1900 of the following members: Prime Minister and Secretary of State for Foreign Affairs, the Marquis of Salisbury; Lord President of the Council, the Duke of Devonshire; Lord High Chancellor, the Earl of Halsbury, formerly Sir Hardinge S. Giffard; Lord Privy Seal, Viscount Cross, formerly Sir Richard Cross; Chancellor of the Duchy of Lancaster, Lord James of Hereford, formerly Sir Henry James; First Lord of the Treasury, Arthur J. Balfour; Secretary of State for the Home Department, Sir M. White Ridley; Chancellor of the Exchequer, Sir Michael E. Hicks-Beach; Secretary of State for the Colonies, Joseph Chamberlain; Secretary of State for War, the Marquis of Lansdowne; Secretary of State for India, Lord George Hamilton; First Lord of the Admiralty, G. J. Goschen; President of the Local Government Board, Henry Chaplin; President of the Board of Trade, C. T. Ritchie; Lord Lieutenant of Ireland, Earl Cadogan; Lord Chancellor of Ireland, Lord Ashbourne, formerly Edward Gibson; Secretary for Scotland, Lord Balfour of Burleigh; First Commissioner of Works, A. Akers-Douglas; President of the Board of Agriculture, W. H. Long.

Area and Population.—The area of the United Kingdom is 120,979 square miles, England having an area of 50,687, Wales 7,442, Scotland 29,785, Ireland 32,583, the Isle of Man 227, and the Channel Islands 75 square miles. The estimated population of England and Wales on June 30, 1899, was 31,742,588; of Scotland, 4,281,850; of Ireland, 4,535,516; total United Kingdom, 40,559,954. The metropolis of London in 1899 was computed to have 6,528,434, of whom 4,546,752 lived in the inner ring or registration London and 1,981,682 in the outer ring. Of the large towns of England and Wales, Liverpool contained an estimated population of 634,212 in the middle of 1899; Manchester, 543,902; Birmingham, 514,956; Leeds, 423,889; Sheffield, 361,169; Bristol, 320,911; Nottingham, 230,384; Bradford, 236,241; Kingston-upon-Hull, 234,270; Newcastle, 228,625; Salford, 218,244; Leicester, 213,851; Portsmouth, 190,741; Cardiff, 185,826; Bolton, 162,221; Oldham, 150,772. Glasgow, in Scotland, had an estimated population of 733,903; Edinburgh, 298,927; Dundee, 166,072. In Ireland the population of Dublin within the metropolitan police district was 361,891 at the census of 1891; of Belfast, 255,950. The number of marriages in England in 1898 was 254,819; of births, 922,873; of deaths, 552,040; excess of births, 370,833. The number of marriages in Scotland was 32,096; of births, 130,879; of deaths, 78,406; excess of births, 52,473. The number of marriages in Ireland was 22,580; of births, 105,457; of deaths, 82,404; excess of births, 23,053. The number of emigrants, natives and foreigners, that sailed from British ports in 1899 was 241,105, of whom 159,201 went to the

United States, 33,727 to British North America, and 12,289 to Australasia. Of the total for 1898 of 205,171 emigrants, 119,739 were males and 85,432 females. The number of British and Irish emigrants in 1899 was 146,772, an increase of 6,133 over the preceding year. Of the total, 87,703 were English, a decrease of 2,976; 16,152 were Scotch, an increase of 582; and 42,922 were Irish, an increase of 8,527. The number of immigrants, natives and foreigners, in 1898, was 139,346, reducing the total net emigration to 65,825; the immigrants of British and Irish origin numbered 91,248, reducing the emigration of the native population to 49,396. The number of Irish who emigrated from Ireland in 1898 was 32,241, making a total of 3,754,899 since 1851. The total emigration of natives of Great Britain and Ireland from 1815 to 1898 was 14,920,263. From 1853 to 1898 the emigration of the native population was 8,549,569, of whom 5,690,172 settled in the United States, 885,739 in British North America, 1,410,068 in Australia and New Zealand, and 563,590 in other countries. The number of elementary day schools in England and Wales, both voluntary and board schools, was 19,937, with 5,576,866 children registered and 4,554,165 in average attendance. There were 5,595 board schools, with an average attendance of 2,087,519 pupils; 11,815 National Society schools, with 1,883,263 pupils; 457 Wesleyan schools, with 124,971 pupils; 1,033 Roman Catholic schools, with 246,128 pupils; and 1,122 British, undenominational, and other schools, with 230,355 pupils. The total number of certificated teachers was 59,874; assistant teachers, 26,736; pupil teachers, 31,038; additional women teachers, 15,136. The number of training colleges was 44, with 3,700 resident students and 14 for day attendance, with 1,050 students. The number of secondary schools in England and Wales in 1897 was 6,209, with 291,544 pupils, about 25 per cent. of them in boarding schools. In Scotland there were 3,067 elementary schools inspected in 1898, with 717,747 children on the registers and 605,776 in average attendance. The total number of schools was 3,113, of which 2,757 were public schools, with an average attendance of 535,636. The number of training colleges in 1899 was 8, with 1,055 students. The number of elementary schools reported in Ireland in 1898 was 8,651, with 808,467 children on the rolls and 518,799 in average attendance. There were 8,604 schools altogether, of which 3,925 were Roman Catholic and 1,401 Protestant, and 3,278 mixed Roman Catholic and Protestant. The elementary schools of the United Kingdom are supported by school fees, local rates, voluntary subscriptions, income from endowments, and parliamentary grants. The parliamentary grants in England in 1899 amounted to £8,021,391 and in Scotland to £1,177,727, besides £599,464 for various British schools; in Ireland grants and rates together were £1,321,777. The universities and colleges of England, Scotland, and Ireland in 1898, numbering 69 colleges altogether, had 1,670 instructors and 25,891 students. The University of Oxford, consisting of 23 colleges, had 95 teachers and 3,446 students; Cambridge University, with 19 colleges, 116 teachers, and 3,016 students; Durham University, a single college, 20 teachers and 170 students; the University of Edinburgh, 103 teachers and 2,848 students; the University of Glasgow, 102 teachers and 2,010 students; the University of Aberdeen, 58 teachers and 765 students; the University of St. Andrews, 59 teachers and 261 students; Dublin University, 54 teachers and 1,100 students; University College, London, 73 teachers and 1,100 students; King's College, London, 136 teachers and 1,465 students;

Queen's College, Belfast, 26 teachers and 311 students; Queen's College, Cork, 23 teachers and 188 students; Queen's College, Galway, 23 teachers and 91 students. Other colleges are at Aberystwith, Bangor, Manchester, Newcastle, Nottingham, Sheffield, Birmingham, Leeds, Bristol, Cardiff, Lampeter, and Liverpool.

Finances.—The revenue for the year ending March 31, 1899, was estimated in the budget at £107,110,000, and the expenditure, including supplementary estimates, at £108,815,036. The actual receipts were £108,336,193, and the actual expenditures £108,150,236, leaving a surplus of £185,957. Taxation by customs, excise, and estate duties, stamps, the land tax, the house duty, and the income and property tax produced £90,435,553, while the nontax revenue, derived from the postal and telegraph services, Crown lands, interest on Suez Canal shares, and miscellaneous sources, was £19,114,980, making the total net receipts £109,600,532. The net revenue from customs was £21,558,227, of which £10,993,727 were collected on tobacco imports, £4,023,504 on tea, £2,124,728 on rum, £1,350,006 on brandy, £761,426 on other spirits, £1,399,099 on wine, £173,590 on coffee, £196,989 on raisins, £120,695 on dried currants, and £414,463 on other articles. The net excise receipts were £29,310,939, namely, £17,109,274 from spirits, £11,038,201 from beer, £246,915 from license duties, £308,975 from railroads, and £7,574 from other sources. From death duties, etc., the net receipts were £11,486,818 in amount, £7,719,943 coming from the estate duty, £43,508 from the temporary estate duty on property of persons dying before Aug. 2, 1894, £57,617 from the probate duty on similar property, £2,873,091 from the legacy duty, £751,227 from the succession duty, and £41,432 from the corporation duty. The yield of the land tax was £805,400 net; of the house duty, £1,676,878. Stamps produced a net revenue of £7,704,920, of which £4,182,377 came from deeds, £1,381,835 from receipts, £667,311 from bills of exchange, £266,404 from patent medicines, £109,277 from licenses, etc., £320,492 from the duty on companies' capital, £230,718 from insurance, £180,789 from bonds to bearer, and £305,717 from other sources. The income and property tax collected amounted to £18,042,311. Of the nontax sources of revenue the post office yielded £12,841,399, the telegraph service £3,204,396, Crown lands £449,735, interest on Suez Canal shares purchased from the Khedive £713,554, and the mint, the Bank of England, fee stamps, etc., £1,905,896. The national expenditure is divided into the consolidated fund charges, amounting for the year ending March 31, 1899, to £27,044,236; the army and navy supply services, amounting to £44,068,000; and the civil and miscellaneous services, amounting to £37,038,000, including the expense of collecting the revenue. Of the consolidated fund charges £25,000,000 were for the national debt, £408,773 for the civil list, £281,568 for annuities and pensions, £70,114 for salaries, £517,069 for courts of justice, £452,382 for payments to local taxation accounts, and £305,330 for miscellaneous payments. The cost of the army was £20,000,000, including £300 for ordnance factories; cost of the navy, £22,025,000; civil services, £22,025,000; customs and inland revenue expenses, £2,816,000; post office expenses, £8,030,000; expense of telegraph service, £3,347,000; packet service, £820,000; total supply services, £81,106,000.

Parliament summoned to a special session in October, 1899, authorized the issue of £10,000,000 of treasury bills toward the expenses of the war in South Africa. Before the close of the financial

year £13,000,000 more were voted. In the budget for 1901 the Chancellor of the Exchequer estimated at £38,000,000 the necessary expenses of the war for the year. The revenue for 1900 was estimated in the budget at £111,157,000, being £2,821,000 more than the revenue for the previous year. In presenting the budget for the following year early in March, 1900, Sir Michael Hicks-Beach estimated it at £110,040,000. The budget estimate of expenditures for 1900 was £110,027,000, to which £745,000 of supplementary estimates were added and from which £1,132,000 were deducted on account of savings, making the exchequer expenditure for the year £110,540,000 and showing a surplus of £5,500,000 if the cost of the war were excluded; but, adding £23,000,000 of supplementary army estimates for the war and £270,000 for interest on the treasury bills authorized in the autumn session, the total exchequer expenditure was expected to be £133,810,000, showing a deficit of £17,770,000, of which £8,000,000 was temporarily provided for by the issue of treasury bills. The receipts from beer, spirits, and tea in 1900 showed a large increase over the preceding year, partly owing to withdrawals from bond toward the close of the financial year in anticipation of higher duties. Receipts from tobacco fell off, and from wine the receipts were less than were expected, though the increase was considerable, owing to the increase in the duties. The death duties produced £13,300,000, not counting £4,171,000 allotted to the local taxation fund. From the estates of millionaires £2,271,000 were received, and of this £900,000 came from the estate of an American living modestly in a London club. The stamp duties, owing principally to activity on the stock exchange, produced £350,000 more than the estimate. The post office receipts and other nontax revenue showed an increase of £573,000 over the previous year. Adding to the expenditure for 1900 as provisionally estimated in the early budget the sum of £9,599,000 paid to the local taxation account, being £78,000 more than in 1899, and further the expenditure on capital account of £4,847,000, of which £1,861,000 came from the surplus of previous years, this expenditure being for barracks, telephones, the Uganda Railroad, naval and military works, and the acquisition of the territory of the Royal Niger Company, the total expenditure for the year ending March 31, 1900, was expected to reach £148,257,000, compared with £121,224,000 in the foregoing year.

The amount of the funded debt on March 31, 1890, was £583,186,305, the estimated capital value of terminable annuities was £36,243,280, and the unfunded debt was £8,133,000, making a total of £627,562,585, to which should be added £312,441 borrowed under the Russian Dutch loan act of 1891, £187,893 under the imperial defense act of 1888, £2,829,029 under the barracks act of 1890, £1,222,276 under the telegraph act of 1892, £1,969,722 under the Uganda Railway act of 1896, £455,381 under the act of 1895 for the acquisition of sites for public offices, and £501,638 under the Whitehall public office act of 1897, these items making a sum of £7,478,380, which increases the gross liabilities to £635,040,965, against which may be offset the value of the Suez Canal shares, £27,451,000 at the market rate, £703,961 of other assets, and £8,919,173 of exchequer balances in bank. During the financial year ending March 31, 1900, the funded debt was reduced by £30,15,000 and the capital value of the terminable annuities was increased by £24,242,000 as the result of the operation of provisions in the finance act of 1899 authorizing the cancellation of £28,

000,000 of consols by the issue of terminable annuities. By the new sinking fund of 1899 the sum of £1,339,000 was redeemed, but the issue of £8,000,000 of treasury bills increased the debt by £1,527,000, without taking account of the deficit of £9,770,000 unprovided for at the end of the year.

The expenditure for 1901 was estimated at £26,000,000 for debt charges, £27,523,000 for the navy, £61,499,000 for the army, £22,839,000 for the civil services, and £16,221,000 for the revenue departments; total, £154,082,000. On the basis of the existing taxation the revenue was estimated at £21,900,000 from customs, £31,800,000 from excise, £13,000,000 from death duties, £8,400,000 from stamps, £800,000 from the land tax, £1,650,000 from the house duty, £18,800,000 from the income tax, £13,800,000 from the post office, £3,550,000 from telegraphs, £450,000 from Crown lands, £850,000 from Suez Canal shares, etc., and £1,900,000 from miscellaneous sources; total, £110,900,000. This left an estimated deficit of £37,182,000 for the year. The war estimates, including £250,000 interest on the war debt, amounted to £38,047,000, to which the sum of £5,000,000 was added as a provision for military and naval contingencies, making with the deficit of £17,000,000 for 1899 due to the war the total sum of £60,000,000 as the estimated cost of the war. To reduce the deficit Sir Michael Hicks-Beach proposed to raise £12,317,000 by increased taxation, of which £6,500,000 are from an increase of the income tax from 8d. to 1s. in the pound, £150,000 from a stamp duty of 1s. on contract notes in all the produce exchanges, the same as is imposed on the contract notes given by brokers of the stock exchange, £1,752,000 from an increase in the beer duty of 1s. a barrel of 36 gallons, £1,915,000 from an increase in the duty on spirits of 6d. a gallon, £1,100,000 from an addition of 4d. a pound to the tobacco duty and 6d. a pound to the duty on foreign cigars, and £1,800,000 from an increase in the tea duty from 4d. to 6d. a pound. This reduces the deficit anticipated for 1901 to £24,868,000, and a suspension of the sinking fund reduces it by £4,640,000 more to £20,225,000. Adding the deficit of £17,770,000 for 1900 and £5,000,000 for military and naval contingencies, the total final deficit would be £42,995,000. To meet this the Chancellor of the Exchequer proposed to renew the treasury bills issued in October, 1899, and issue £5,000,000 more, and to issue a new loan for about £30,000,000, not consols but bonds issued for a term not exceeding ten years, to be repaid as far as possible with what can be exacted from the Transvaal. The plan of taxing produce contracts was given up. Besides the increase in the cigar duty from 5s. to 5s. 6d. a pound, and in the duty on cut plug from 3s. 10d. to 4s. 4d., which was finally voted, the general duty on manufactured tobacco was raised from 3s. 5d. to 3s. 10d. a pound.

When the financial year came to an end the actual deficit for 1900 was found to be £13,882. The revised estimate calculated the deficit for 1901 at £22,541,000, but at the end of July it was calculated at £35,850,000. The Chancellor obtained authority from Parliament to raise £35,000,000 by the creation of bonds redeemable in ten years, or by the issue of treasury bills at his option. He was authorized to borrow £7,550,000 more, and obtained sanction in August for a fresh loan of £13,000,000, giving a margin of £5,818,000 over the total deficit of £49,732,000 as estimated at that time. The total estimated cost of the South African war then stood at £60,323,000, in-

cluding £1,086,000 of interest on war debt. Of this amount £43,563,000 were provided for by loans and £25,460,000 by revenue, including the surplus of £9,335,000 in the revenue over ordinary expenditure in 1900, and the amount of revenue available in 1901 to meet war charges was estimated at £16,125,000. When a vote of £11,500,000 was obtained toward the end of July, including £3,000,000 for operations in China, the war in Africa was officially declared by Lord Roberts to be practically ended, and in this supplementary was included a sum for bringing home 135,000 of the 189,500 imperial troops, leaving 44,500, of whom 30,000 were to form the permanent garrison. The rest were expected to make South Africa their future home. The total sum voted for the war up to that time was £61,022,700. The total number of troops then in South Africa was 223,500.

The Army.—The strength of the regular army of the United Kingdom provided for in the estimates for 1900 is 8,288 commissioned officers, 1,120 warrant officers, 17,355 sergeants, 3,952 drummers, trumpeters, etc., and 154,138 rank and file; total, 184,553 men, an increase of 4,340 over 1899. The general staff numbered 351 officers, with 136 non-commissioned officers and privates; army accountants, 209; chaplains, 86; medical department, 97; veterinary department, 68, with 3 assistants; total staff and departments, 811 officers, 133 non-commissioned officers, and 7 men. The total authorized strength of the regiments was 6,670 officers, 15,681 noncommissioned officers and musicians, and 153,958 rank and file. The cavalry, including the Life Guards and Horse Guards, numbered 551 officers, 1,334 noncommissioned officers, etc., and 12,343 privates; the Royal Artillery, 1,142 officers, 2,569 noncommissioned officers, etc., and 26,474 privates; the Royal Engineers, 618 officers, 1,357 noncommissioned officers, etc., and 5,944 privates; the infantry, 3,042 officers, 7,408 non-commissioned officers, etc., and 92,905 privates; colonial corps, 280 officers, 647 noncommissioned officers, etc., and 9,007 privates; departmental corps, 753 officers, 1,464 noncommissioned officers, etc., and 3,309 privates; army service corps, 284 officers, 902 noncommissioned officers, etc., and 3,699 privates. On the staff of the auxiliary forces were 598 officers, 6,077 noncommissioned officers, and 22 men; in the military academies at Woolwich and Sandhurst, other colleges and schools, engaged in gunnery and musketry instruction, in the regimental schools, and in miscellaneous establishments were 209 officers, 536 noncommissioned officers, and 151 privates. The number of horses provided for was 18,701. The troops maintained in the United Kingdom in 1899 were 11,676 cavalry, 17,572 artillery, 5,351 engineers, and 72,087 infantry and special corps, making a total, of 106,686 of all ranks, of whom 79,057 were stationed in England, 3,942 in Scotland, and 23,687 in Ireland. The number stationed in Egypt in January, 1899, was 4,257; in the colonies, 44,605; in India, 74,466; and in Crete, 1,837; total abroad, 125,165, with 15,389 horses; total at home and abroad, 231,851, with 29,281 horses. Including the auxiliary forces and the regular forces on Indian establishment, the total established strength of the British military forces in 1900 was 752,490 men of all ranks, consisting of 176,309 regular troops at home and in the colonies, 73,157 in India, 90,000 army reserves, 130,300 militia, 11,891 yeomanry, and 264,833 volunteers. The effective strength of the regular troops in home and colonial service was 157,863; in India, 74,467; army reserve, 78,839; militia, 116,582; yeomanry, 10,207; volunteers, 231,624; total effectives, 669,582.

The original estimate for the year ending March 31, 1900, provided for 184,853 men of all ranks on the British establishment. In consequence of the war in South Africa the whole of the army reserve was called out, discharges and transfers to the reserve were suspended, a number of troops were temporarily transferred from the Indian to the British establishment, and various colonial and other forces were raised for service in South Africa and the augmentation of the army at home. The supplementary estimate of Oct. 17, 1899, provided for 35,000 men, and the supplementary estimate presented on Feb. 9, 1900, for 120,000 more, making the total number 339,853 officers and men. On Jan. 1, 1900, the number of men of all ranks serving with the colors at home and abroad was 301,544, compared with 232,330 on Jan. 1, 1899, the Household cavalry having been increased from 1,298 to 1,327, the cavalry of the line from 12,169 to 18,800, the horse and field artillery from 10,196 to 18,803, the mounted and garrison artillery from 15,722 to 18,119, the Royal Engineers from 7,637 to 10,210, the foot guards from 7,240 to 12,008, the infantry from 87,095 to 133,743, the colonial corps from 7,242 to 8,778, and the army service corps from 9,260 to 13,085, making a total at home and in the colonies 234,963, against 157,863 at the beginning of 1899, while the British army in India was reduced in number from 74,467 to 66,581. The decrease of the Indian army was due to the fact that 4 cavalry regiments, 2 batteries of horse and 3 of field artillery, 4 infantry battalions, and 3 companies of mounted infantry had been withdrawn for the war in Africa. These numbers do not include the militia, about 100,000 men, all of whom had been or were to be embodied, or imperial yeomanry, about 100,000 men, or the enlisted British volunteers, numbering about 9,000 exclusive of the waiting companies, or the large force of colonial volunteer troops, estimated at 35,000 men. The estimates for the year ending March 31, 1901, provided for 430,000 men in the British army. Pay and subsistence had to be provided for as many as 500,000 troops, and the estimates reached the unprecedented total of £61,499,400. This was based on the assumption that the full field force would have to be maintained in South Africa only till Sept. 30, 1900, and would then be cut down to a garrison of about 30,000 men. A regiment of Irish guards was raised after the Queen's visit to Ireland in the summer of 1900. A permanent addition has been made to the army of 7 batteries of horse artillery and 36 batteries of field artillery, so as to provide the artillery for 2 more army corps; also of 3 howitzer batteries for each of the 12 army corps. In time of peace the new horse and field batteries are to be retained on a reduced establishment. The formation of new depots for the field artillery enables reservists of that arm to rejoin and be equipped like infantry reservists. Additions of 2,038 men of all ranks were made to the Royal Engineers. This makes the number of battalions at home equal to the number stationed abroad, and to meet the need for an increased force to be maintained abroad 12 new line battalions will be raised and attached as third and fourth battalions to existing regiments. An endeavor has been made to add to the number of men engaged for three years' service with the colors in the battalions serving at home. An addition of 29 companies, numbering 2,220 men of all ranks, has been made to the army service corps, one of 8 companies, numbering 450 men of all ranks, to the ordnance corps, and one of 260 men of all ranks to the medical corps. Regimental transport has been provided for the militia, yeo-

any, and volunteers, and the whole of the volunteer artillery will be rearmed with 4.7-inch quick-firing guns or with 15-pounder field guns, these latter to be obtained from the Royal Artillery as fast as it can be supplied with modern quick-firing guns. In the reserve battalions for home defense 20,000 men were enrolled in 1900. A fortnight's training was provided for the volunteers, and more than three quarters of them availed themselves of the offer. The volunteers did not go to the war in any numbers, but of the militia, numbering 99,000, inclusive of the militia reserve 11,000 men, 22,000 were serving abroad in 1900. The regular army of 92,000 men remaining at home was useless for the field, consisting in great part of young men under the age of twenty, not fit to go out of the country until they have attained the necessary maturity, vigor, training, and discipline. The effective strength of the British garrisons abroad in 1900 was 10,663 men in Malta, 128 in Gibraltar, 8,827 in Cape Colony and Natal, 776 in Ceylon, 2,055 in Bermuda, 1,742 in Jamaica, 1,536 in Barbados and St. Lucia, 1,112 in Kei-Hai-Wei, 1,669 in the Straits Settlements, 1,330 in Mauritius, 1,849 on the west coast of Africa, 135 in Cyprus, 771 in St. Helena, and 4,363 in Egypt, besides 73,157 in India. These figures include colonial corps, viz., 725 royal Malta artillery, 309 native artillery for Sierra Leone and the West Indies, 130 submarine miners in the East Indies and 141 in the West Indies, 3,334 men in the West Indian regiments, 1,014 in the Hong-Kong regiment, 1,083 in the Chinese regiment, 1,076 in the West African regiment, and 1,100 in the British Central African regiment; total, 9,934 native and colonial troops.

The Navy.—The effective strength of the British navy in the beginning of 1900, excluding obsolete vessels and such as are only suitable for coast defense, was 20 first-class, 24 second-class, and 11 third-class battle ships, 9 second-class armored cruisers, 21 first-class, 45 second-class, and 1 third-class protected cruisers, 33 torpedo gunboats, 80 destroyers, 2 torpedo ships, and 11 first-class and 71 second-class torpedo boats. There were 10 first-class battle ships launched and being fitted for service and 6 more building or projected, 1 first-class armored cruiser already launched and 12 building or to be built, 1 small protected cruiser launched and 8 more in hand, and 16 destroyers being fitted and 12 under way. The obsolete and coast-defense armor clads numbered 21, obsolete and small cruisers 28, third-class torpedo boats 95, and of vessels for miscellaneous services there were 89, besides 2 not yet completed and 4 building or authorized. The unfinished vessels and vessels awaiting armament were 12 battle ships, 16 first-class, 6 second-class, and 10 third-class cruisers, 6 sloop and 4 twin-screw gunboats, 2 destroyers, and 1 royal yacht. The number of vessels in commission on Jan. 1, 1900, was 174, exclusive of coast guards, vessels in port service, hospital ships, gunboats, and all small craft, and these vessels were stationed as follows: Mediterranean and Red Sea, 43; China, 30; Cape of Good Hope and West Africa, 16; North America and West Indies, 15; Channel squadron, 14; Australia, 10; East Indies, 10; Pacific, 8; southeast coast of America, 4; training squadron, 4; surveying, 7; particular service, 11.

The type of battle ship which was adopted in connection with the naval defense act of 1889 was that of the Royal Sovereign, launched in 1891, which was followed in the Empress of India, Camille, Repulse, Resolution, Revenge, Royal Oak, and Hood, all sister ships, having a displacement of 14,150 tons, 18 inches of armor over the

vitals, 13,000 horse power, 17½ knots speed, and an armament of 4 13.5-inch guns in barbets and 10 6-inch, 16 6-pounder, and 12 3-pounder quick firers. The Hood is an exception, having her heavy guns mounted in turrets. The Centurion and Barfleur, of 10,500 tons, with 12 inches of armor, 13,000 horse power, a speed of 18 knots, and an armament of 4 29-ton guns in barbets and 10 4.7-inch, 8 6-pounder, and 12 3-pounder quick firers, are lighter ships of the same type, which was an improvement on the Admiral class, with better protection, higher freeboard, and greater weight of fire. The building of 9 first-class, 29 second-class, and 4 third-class cruisers and 18 torpedo gunboats completed the programme of 1889. The Majestic type of battle ship was adopted in the programme of 1892, and on the model of the Majestic, launched in 1895, were constructed the Magnificent, Victorious, Prince George, Mars, Jupiter, Illustrious, Hannibal, and Cæsar, of 14,900 tons, 14-inch armor, 12,000 horse power, a speed of 17½ knots, and an armament of 4 12-inch guns that can be loaded by hand and are protected by armored shields revolving with the turntables, the guns being mounted in pairs in armored barbets, 12 6-inch quick-firing guns well protected, 16 12-pounder quick firers of a new design, and 12 3-pounders, 4 submerged torpedo tubes and 1 above water, a length of 390 feet, 78 feet extreme breadth, and a mean draught of 28 feet. The Renown, of 12,350 tons, is an improved Centurion, having a better protected and more powerful quick-firing armament, consisting of 10 6-inch, 14 12-pounder, and 12 3-pounder guns, and developing a speed of 18 knots with engines of 10,000 horse power. The Canopus, launched in 1897 and followed by the Ocean, Goliath, and Albion, is a type designed for speed and quick maneuvering, having a displacement of 12,900 tons, with 12 inches of extreme armor and a belt of 6 inches, instead of 9 inches as in the Majestic, engines of 13,500 horse power giving a speed of 18½ knots, and carrying 4 12-inch of the new type of breechloaders and 12 6-inch, 10 3-inch, and 6 3-pounder quick firers. The Glory and Vengeance, launched in 1899, have a stronger armament. Heavier armor was adopted for the Formidable and Irresistible, launched in 1898, of 14,700 tons, engines of 15,000 horse power, making 18 knots, and having a more powerful secondary armament, consisting of 12 6-inch Vickers guns and 16 3-inch and 6 6-pounder quick firers. Of this type are the London, Implacable, Bulwark, and Venerable, launched in 1899, having 18 3-inch guns and 8 3-pounders in their quick-firing battery and a 9-inch Krupp steel belt extending to within a few feet of the bow. The Duncan and Cornwallis have an improved armament. The Russell, Exmouth, Montagu, and Albemarle, of 14,000 tons, are a development of the London class, in which a lighter belt is used, one of 7 inches, not merely for greater speed but for less draught to enable them to pass through the Suez Canal. Their extreme armor is 11 inches; their armament consists of 2 pairs of 12-inch guns in barbets, 12 6-inch quick firers, and 12 of the 3-inch or 12-pounders and 6 3-pounders; their engines, of 18,000 horse power, are expected to give a speed of 19 knots. All the later battle ships, from the Canopus on, as well as the cruisers, are fitted with Belleville water-tube boilers. The protected cruisers Powerful and Venerable, of 14,200 tons, armed with 2 9.2-inch, 12 6-inch quick-firing, 18 12-pounders, and 12 3-pounders, have engines of 25,000 horse power and can easily steam 22 knots with forced draught. The Dido, Doris, and Isis, launched in 1896, displacing 5,600 tons, carry

5 6-inch and 4 4.7-inch quick firers, besides smaller ones, and with 9,600 horse power can steam 19½ knots. The *Furious*, *Gladiator*, *Vindictive*, and *Arrogant*, of 5,750 tons, carry 4 6-inch, 6 4.7-inch, 9 9-pounder, and 8 small quick-firing guns, and have engines of 10,000 horse power giving the same speed. The *Hermes*, *Hyacinth*, and *Highflyer*, of 5,600 tons, are armed with 11 6-inch and 15 small quick firers, and can make 19½ knots with engines of 9,600 horse power. The *Diadem*, launched in 1896 and followed by the *Andromeda*, *Niobe*, *Europa*, *Spartiate*, *Argonaut*, *Amphitrite*, and *Ariadne*, is the latest development of the protected cruiser, displacing 11,000 tons, carrying 16 6-inch quick firers, 14 12-pounders, and 20 small ones, and steaming 20½ knots, with *Belleville* engines of 16,500 horse power. All these later vessels have a 4-inch curved steel deck covering their vital parts. Their strong armament is well protected, their freeboard is high, the bow and stern guns are placed well above water, and the numerous water-tight compartments make it impossible to sink them. The armored cruisers of the new programme of 1897 were the *Cressy*, *Hogue*, *Aboukir*, *Sutlej*, *Euryalus*, and *Bacchante*, of 12,000 tons, carrying 2 9.2-inch, 12 6-inch quick-firing, and 14 12-pounder quick-firing guns, and having engines of 21,000 horse power capable of making 21 knots with natural draught, their length being 440 feet, beam 69½ feet, and draught of water 26 feet 3 inches. Their armor-piercing guns of a new type have extraordinary range and penetrating power. The supplementary programme of 1898 called for 4 armored cruisers of 9,800 tons—the *Kent*, *Monmouth*, *Bedford*, and *Essex*—carrying 14 6-inch quick firers and a large number of small ones, and having engines of 22,000 horse power, capable of making 21 knots with natural draught. The latest type of the armored cruiser is represented by the *Drake*, *King Alfred*, *Leviathan*, and *Good Hope*, of 14,100 tons, armed with 9.2-inch bow and stern chasers of the new kind and 16 6-inch and 14 12-pounder quick firers, and fitted with engines of 30,000 horse power to produce a speed of 23 knots without forced draught. Of the latest destroyers 3 have made 32 or 33 knots with the newest water-tube boilers and the steam turbine wheel has been tried with 1 in order to attain a higher speed.

The navy estimates for 1901 amounted to £27,522,600, an increase of £928,100 over those of the preceding year, the growth in five years having been nearly 50 per cent. They do not include £2,000,000 expended under the naval works act. Subsequently a supplementary estimate of £1,269,300 increased the expenditure for the year to £28,791,000. The supplementary estimate was to provide additional reserves of guns, gun mountings, ammunition, and torpedoes, to replace old machine guns with *Maxims*, to purchase 5 destroyers, to build a repairing ship.

Commerce and Production.—The area sown to grain in Great Britain in 1899 was 7,406,887 and in Ireland 1,371,719 acres, to green crops in Great Britain 3,149,103 and in Ireland 1,101,991 acres, to flax in Great Britain 476 and in Ireland 1,251,262 acres, bare fallow in Great Britain 338,574 and in Ireland 13,018 acres, pasture in Great Britain 16,630,747 and in Ireland 11,442,318 acres. There were in Great Britain 2,000,981 acres in wheat, 1,982,108 in barley, 2,959,755 in oats, 249,056 in beans, 162,751 in peas, 547,682 in potatoes, and 1,740,993 in turnips. In Ireland 51,859 acres were in wheat, 169,660 in barley, 1,135,075 in oats,

1,988 in beans, 426 in peas, 662,898 in potatoes, and 301,455 in turnips. The crops of grain obtained in Great Britain were 65,529,000 bushels of wheat, 67,716,000 of barley, and 114,747,000 of oats. In 1888 there were harvested in Great Britain 73,029,000 bushels of wheat, 68,052,000 of barley, 118,921,000 of oats, 7,200,000 of beans, 4,849,000 of peas, 3,283,000 tons of potatoes, and 21,337,000 tons of turnips; in Ireland, 1,856,000 bushels of wheat, 6,679,000 of barley, 53,657,000 of oats, 67,000 of beans, 9,000 of peas, 2,942,000 tons of potatoes, and 5,163,000 tons of turnips. The yield of wheat was 34.74 bushels an acre in Great Britain and 35.16 bushels in Ireland; of barley, 35.75 bushels in Great Britain and 42.23 bushels in Ireland; of oats, 40.76 bushels in Great Britain and 46.04 bushels in Ireland. In 1899 only 32.75 bushels of wheat were obtained in Great Britain. The live stock of Great Britain in 1899 consisted of 1,516,680 horses, 6,795,720 cattle, 27,238,754 sheep, and 2,623,813 pigs; in Ireland there were 501,982 horses, 4,507,272 cattle, 4,364,076 sheep, and 1,363,311 pigs.

Of 56,401,544 acres, the total area of Great Britain, 12,181,909 acres were under farm crops in 1900, and of the rest 4,373,000 acres were permanent meadow and 12,355,936 acres permanent pasture land, so that 28,910,944 acres, little over half the area of the island, were utilized to provide food for the population. The acreage under wheat declined to 1,845,042 acres; that under barley increased to 1,990,265 acres; that under oats to 3,026,088 acres; that under potatoes to 561,361 acres. Clover and rotation grasses occupied 2,557,377 acres. The number of cattle in 1900 was 6,805,170; of sheep, 26,592,226; of pigs, 2,381,932.

The quantity of fish landed on the coasts of the British Islands during 1899 was 739,315 tons, valued at £8,864,970, besides £1,520,632 worth of shellfish. The quantity of fish conveyed by railroad in 1898 was 486,784 tons. The imports of fish were 129,300 tons, valued at £2,931,764. The value of £2,586,752 was exported, including herrings worth £1,896,540. The quantity of iron ore raised in 1898 was 14,176,938 tons, valued at £3,406,828, containing 4,850,508 tons of iron, worth £12,740,043; the quantity of iron pyrites was 12,108 tons, worth £4,804; the quantity of lead ore was 32,985 tons, valued at £267,402, containing 25,355 tons of metal, of the value of £332,995; the quantity of copper ore was 9,001 tons, valued at £25,849, containing 640 tons of copper, of the value of £35,523; the quantity of copper precipitate was 130 tons, value £1,300; the quantity of zinc ore was 23,552 tons, valued at £117,784, containing 8,574 tons of zinc, valued at £179,482; the quantity of bog iron ore was 5,418 tons, value £1,354; the quantity of aluminum clay and shale was 26,019 tons, worth £4,600, containing 310 tons of metal, worth £45,880; the quantity of sodium obtained was 85 tons, worth £12,750; the quantity of silver extracted was 211,403 ounces, worth £23,728; the quantity of gold ore was 703 tons, valued at £1,158, containing 395 ounces or £1,290 worth of gold; total value of ores, £4,119,204; of metals, £13,717,512. The production of coal was 202,054,516 tons, worth £64,169,382; of clays, 14,738,474 tons, worth £1,616,358; of sandstone, 5,242,115 tons, worth £1,632,786; of slate, 668,839 tons, worth £1,900,228; of limestone, 11,980,578 tons, worth £1,256,154; of salt, 1,878,665 tons, worth £620,115; of oil shale, 2,137,993 tons, worth £534,498; of granite, 1,875,817 tons, worth £576,457; of basalt, 2,602,491 tons, worth £465,543; of chalk, 4,298,014 tons, worth £180,651; of gravel and sand, 1,625,690 tons, worth £135,538; of gypsum, 106,028 tons, worth £71,316; of arsenic and

arsenical pyrites, 15,318 tons, worth £61,931; of barites, 22,225 tons, worth £23,253; of ochre, 9,827 tons, worth £13,003; of other nonmetallic minerals, 98,100 tons, worth £38,646; total value, £73,295,859, or including ores £77,415,063. There was an increase over 1897 of £5,371,202 in the value of minerals and of £1,449,421 in the value of metals produced. Of the total value of mineral products England furnished £55,400,674, Wales £10,474,426, Scotland £11,271,909, Ireland £214,226, and the Isle of Man £53,982. The number of workers in the mines was 741,125, of whom 106,984 were in the coal mines and 34,231 in metaliferous mines, and in quarries 134,478 persons were employed. The exports of coal in 1898 were 6,562,796 tons, valued at £18,135,502. The exports went to France, Italy, Germany, Sweden, Russia, Egypt, Spain, Denmark, Brazil, Norway, the Argentine Republic, Holland, Portugal, and Algeria. The quantity of iron ore imported in 1898 was 5,468,396 tons, valued at £4,030,648, of which five sevenths came from Spain. The quantity of ore smelted in 378 blast furnaces was 9,958,167 tons in 1898, producing 8,609,719 tons of pig iron. The quantity of pig and puddled iron imported was 159,523 tons; pig and puddled iron exported, 1,042,853 tons. The export of bar and angle iron was 150,119 tons; railroad iron, 99,403 tons; wire, 44,123 tons; plates for tinning, 8,327 tons; tin plates, 250,953 tons; cast and wrought iron, 355,662 tons; hoops and plates, 27,788 tons; old iron, 84,802 tons; steel, unwrought, 285,249 tons; steel and iron, 35,071 tons; total iron and steel exports, 3,244,350 tons. The export of copper ore and regulus was 164,707 tons; of copper, 72,957 tons; of lead, 194,479 tons; of tin, 20,329 tons; of zinc, 77,470 tons.

The quantity of raw cotton imported in 1898 was 2,128,548,352 pounds; retained for home consumption, 1,925,475,888 pounds; exported, 203,246,464 pounds. The importation of raw wool was 94,299,738 pounds; retained for home consumption, 410,881,985 pounds; exported, 283,317,748 pounds. Of the total quantity imported 447,475,548 pounds were Australian wool. The consumption of cotton in 1899 was 1,759,000,000 pounds; of wool, 631,000,000 pounds; of flax, 27,000,000 pounds. The value of cotton manufactures exported was £67,555,000; of wool manufactures, £21,508,000; of linen manufactures, £5,584,000. The imports of raw cotton in 1899 were 1,626,000,000 pounds, of which 284,000,000 pounds were exported, leaving for home consumption 1,342,000,000 pounds. The imports of sheep and lamb wool in 1899 were 665,000,000 pounds; obtained from imported sheepskins, 31,000,000 pounds; domestic production, 140,000,000 pounds; goats' hair imported, 28,000,000 pounds; import of woolen rags, 73,000,000 pounds; total wool supply, 37,000,000 pounds, from which are deducted 84,000,000 pounds of foreign and 22,000,000 pounds of domestic wool exported, which leaves 31,000,000 pounds retained for home consumption. The imports of flax and tow in 1899 were 21,000,000 pounds and the home production amounted to 15,000,000 pounds, while the exports were 9,000,000 pounds, leaving 27,000,000 for home consumption. The cotton yarn exported in 1899 was 213,000,000 pounds in amount; woolen yarn, 64,000,000 pounds; linen yarn, 18,000,000 pounds. The total value of cotton goods exported in 1899 was £67,500,000; of woolen goods, £21,000,000; of linen goods, £5,600,000; total, £94,000,000.

The total value of imports into the United Kingdom in 1899 was £485,075,514; exports of British produce, £264,660,647; exports of foreign

and colonial produce, £65,019,549; total imports and exports, £814,755,710. The per capita value of the commerce passed £19, which was less than in 1889, 1890, and 1891, but more considerably than in the intervening years. The share of England and Wales in the total trade of 1898 was 90.6 per cent.; of Scotland, 7.9 per cent.; of Ireland, 1.5 per cent. The total value of imports in 1898 was £470,378,583; of exports of British produce, £233,359,240; of exports of colonial and foreign produce, £60,654,748; total trade, £704,392,571. The imports from British possessions and the exports to them of British produce and manufactures in 1898 are given in the following table:

BRITISH POSSESSIONS.	Imports.	Exports.
India.....	£27,470,081	£29,729,589
Australasia.....	28,850,284	21,123,086
British North America.....	20,754,642	6,154,773
South and East Africa.....	6,173,876	12,457,124
Straits Settlements.....	3,941,909	2,773,312
Hong-Kong.....	736,637	2,226,115
British West Indies.....	1,283,413	1,899,960
Ceylon.....	4,847,721	1,177,138
British Guiana.....	575,714	607,247
Channel Islands.....	1,553,065	1,067,977
West Africa.....	2,352,265	1,999,605
Malta.....	92,829	790,785
Mauritius.....	100,863	239,242
All others.....	710,686	1,241,888
Total.....	£99,433,965	£68,496,761

The following table gives the values of imports from foreign countries in 1898 and of the exports to them of British produce and manufactures:

FOREIGN COUNTRIES.	Imports.	Exports.
United States.....	£126,062,155	£14,716,480
France.....	51,396,793	13,706,246
Germany.....	28,534,150	22,525,267
Netherlands.....	26,532,904	8,618,719
Belgium.....	21,534,313	8,802,075
Russia.....	19,489,514	9,227,968
Spain.....	13,188,258	2,847,698
Egypt.....	8,855,680	4,419,078
China.....	2,668,064	5,089,264
Brazil.....	4,101,773	6,196,286
Italy.....	3,332,213	5,647,707
Sweden.....	9,736,931	3,998,470
Turkey.....	4,800,792	6,118,316
Argentine Republic.....	7,788,332	5,586,276
Denmark.....	11,703,384	3,337,743
Portugal.....	3,448,056	1,520,900
Roumania.....	2,570,601	1,338,264
Chili.....	3,633,552	1,690,505
Japan.....	1,158,134	4,913,162
Norway.....	4,966,500	2,440,729
Java.....	406,943	1,915,082
Greece.....	1,448,353	1,139,712
Foreign West Africa.....	563,597	1,094,023
Austria.....	1,135,482	1,671,874
Peru.....	1,537,428	805,793
Central America.....	1,170,801	550,040
Uruguay.....	392,014	1,256,110
Spanish West Indies.....	13,464	273,841
Mexico.....	264,062	1,751,503
Philippine Islands.....	1,496,594	216,178
Colombia.....	635,488	789,692
Venezuela.....	45,599	468,822
Algeria.....	675,906	300,749
Morocco.....	386,088	433,135
Ecuador.....	267,164	323,454
Hayti and Santo Domingo.....	91,483	195,023
Tunis.....	231,064	295,128
Foreign East Africa.....	91,586	1,210,065
Persia.....	193,291	317,345
Siam.....	63,740	211,175
Bulgaria.....	94,752	302,763
Madagascar.....	30,880	84,604
Cochin China and Tonquin.....	51,450	76,393
All other countries.....	1,541,234	1,597,165
Total.....	£370,944,628	£149,932,479

The imports of live animals for food were £10,385,676 in value in 1898 and £9,515,012 in 1899; articles of food and drink free of duty, £106,913,341 in 1898 and £169,149,654 in 1899;

articles of food and drink paying duty, £26,817,470 in 1898 and £26,375,134 in 1899; tobacco, £3,887,010 in 1898 and £5,616,458 in 1899; metals, £21,852,381 in 1898 and £28,263,843 in 1899; chemicals, colors, and tan, £5,484,420 in 1898 and £5,768,890 in 1899; oils, £8,356,405 in 1898 and £9,688,760 in 1899; raw textile materials, £71,268,713 in 1898 and £65,083,636 in 1899; raw materials for sundry industries and manufactures, £52,226,006 in 1898 and £56,666,589 in 1899; manufactured articles, £37,076,479 in 1898 and £91,293,485 in 1899; miscellaneous articles, £14,797,076 in 1898 and £15,914,563 in 1899; imports by parcel post, £1,313,606 in 1898 and £1,139,490 in 1899. The exports of live animals were £1,103,984 in value in 1898 and £1,003,075 in 1899; articles of food and drink, £12,104,608 in 1898 and £12,588,666 in 1899; raw materials, £21,076,823 in 1898 and £26,581,956 in 1899; yarns and textile fabrics, £94,508,128 in 1898 and £99,454,533 in 1899; metals and metal manufactures other than machinery, £32,746,790 in 1898 and £40,912,443 in 1899; machinery and mill work, £18,389,973 in 1898 and £19,650,881 in 1899; ships not registered as British, not recorded prior to 1899 and in that year, £9,195,192; apparel and articles for personal use, £9,577,084 in 1898 and £9,554,511 in 1899; chemicals and chemical and medicinal preparations, £8,389,215 in 1898 and £8,855,523 in 1899; all other articles either manufactured or partly manufactured, £33,322,975 in 1898 and £35,016,514 in 1899; exports by parcel post, £2,139,660 in 1898 and £2,467,353 in 1899. The imports of wheat, not including flour, were 15,569,370 quarters in 1899, against 15,240,000 quarters in 1898, 14,656,600 quarters in 1897, 14,063,760 quarters in 1890, 12,752,800 quarters in 1880, and 7,131,100 quarters in 1870. Including flour, the imports of cereals were 194,297,707 hundredweight in 1899, against 191,827,817 hundredweight in 1898, and 179,762,948 hundredweight in 1897. The imports of wheat in 1899 were 17,151,730 hundredweight from British possessions and 49,485,248 hundredweight from foreign countries. Of the total 34,650,640 hundredweight came from the United States, 11,368,600 hundredweight from the Argentine Republic, 8,192,200 hundredweight from India, 5,256,500 hundredweight from Canada, 3,703,030 hundredweight from Australia and New Zealand, 2,518,800 hundredweight from Russia, 466,030 hundredweight from Germany, 265,600 hundredweight from Chili, 32,100 hundredweight from Roumania, and 27,300 hundredweight from Turkey. The quantity of flour imported was 22,945,708 hundredweight, of which the United States supplied 18,405,796 hundredweight. The imports of tea in 1898 were 271,593,000 pounds. In 1878 China supplied 80.85 per cent. of the tea imported into the United Kingdom, India 17.29 per cent., the Netherlands 1.54 per cent., and other countries 0.32 per cent. In 1899 the proportion of India was 51.38 per cent., while Ceylon sent 35.94 per cent., China only 9.91 per cent., the Netherlands 1.37 per cent., and other countries 1.40 per cent. The imports of potatoes in 1899 were 5,157,811 hundredweight; of rice, 5,749,223 hundredweight; of bacon and hams, 7,783,204 hundredweight; of fish, 2,482,693 hundredweight; of refined sugar, 17,808,100 hundredweight; of raw sugar, 13,121,709 hundredweight; of tea, for consumption, 242,560,814 pounds; of butter, 3,389,851 hundredweight; of margarine, 953,175 hundredweight; of cheese, 2,389,313 hundredweight; of beef, 3,980,805 hundredweight; of preserved meat, 652,424 hundredweight; the number of sheep and lambs, 607,755; the number of cattle, 503,504; imports of eggs, 16,174,760 great hun-

dreds; of spirits, for consumption, 8,643,661 proof gallons; of wine, for consumption, 16,061,975 gallons. The value of the grain and flour imported was £62,909,264 in 1898 and £58,088,561 in 1899; of raw cotton, £34,125,554 in 1898 and £27,673,039 in 1899; of wool, £22,437,188 in 1898 and £23,579,769 in 1899; of sugar, raw and refined, £17,222,001 in 1898 and £18,058,928 in 1899; of butter and margarine, £18,346,167 in 1898 and £19,762,892 in 1899; of timber and wood, £21,283,947 in 1898 and £22,890,645 in 1899; of silk manufactures, £16,623,210 in 1898 and £16,109,583 in 1899; of flax, hemp, and jute, £9,042,711 in 1898 and £9,248,421 in 1899; of tea, £10,335,643 in 1898 and £10,751,164 in 1899; of woollen manufactures and yarn, £11,901,747 in 1898 and £12,173,292 in 1899; of seeds, £6,012,692 in 1898 and £6,277,100 in 1899; of fruits and hops, £8,000,942 in 1898 and £7,971,590 in 1899; of currants and raisins, £1,965,532 in 1898 and £2,130,800 in 1899; of leather and dressed hides and skins, £7,778,261 in 1898 and £8,581,310 in 1899; of wine, £6,575,601 in 1898 and £5,632,647 in 1899; of cheese, £4,970,242 in 1898 and £5,515,091 in 1899; of copper ore and regulus, £2,614,188 in 1898 and £3,514,736 in 1899; of copper partly wrought, £3,597,665 in 1898 and £4,313,455 in 1899; of iron ore, £4,034,048 in 1898 and £5,375,038 in 1899; of iron in bars, £556,549 in 1898 and £577,358 in 1899; of iron manufactures, £7,321,577 in 1898 and £7,905,415 in 1899; of lead, £2,521,356 in 1898 and £2,888,837 in 1899; of tin, £1,389,601 in 1898 and £3,298,182 in 1899; of zinc and zinc manufactures, £1,920,291 in 1898 and £2,257,311 in 1899; of eggs, £4,457,117 in 1898 and £5,044,392 in 1899; of coffee, £3,590,871 in 1898 and £3,470,796 in 1899. The value of cotton manufactures exported in 1898 was £55,977,505 and of cotton yarn £8,923,272, making a total of £64,900,777, whereas in 1899 the export of cotton fabrics was £50,501,957 and of yarn £8,054,664, a total of £58,556,621. The exports of woollen manufactures were £13,699,435 in 1898 and of woollen yarn £6,443,739, a total of £20,143,174, and in 1899 the figure for woollen manufactures was £14,784,837 and for yarn £6,723,023, a total of £21,507,860. The exports of linen manufactures were £4,392,854 in value in 1898 and £5,075,280 in 1899; of linen yarn, £885,330 in 1898 and £909,012 in 1899; of jute manufactures, £1,854,567 in 1898 and £1,062,860 in 1899; of jute yarn, £469,165 in 1898 and £460,860 in 1899; of apparel and haberdashery, £6,200,179 in 1898 and £6,170,083 in 1899. The value of the exports of pig iron was £2,739,093 in 1898 and £4,784,357 in 1899; of bar, angle, bolt, and rod iron, £993,973 in 1898 and £1,227,336 in 1899; of railroad iron of all sorts, £3,011,645 in 1898 and £3,130,512 in 1899; of wire, £772,604 in 1898 and £888,201 in 1899; of tin plates, £2,744,077 in 1898 and £3,167,683 in 1899; of hoops, sheets, and plates, £3,311,557 in 1898 and £4,053,790 in 1899; of cast and wrought iron of all sorts, £4,732,459 in 1898 and £5,232,098 in 1899; of old iron, £238,561 in 1898 and £390,524 in 1899; of steel and manufactures part of iron, £4,086,693 in 1898 and £5,218,279 in 1899. The value of hardware and cutlery exported in 1898 was £1,986,692, and £2,140,236 in 1899; of copper, £2,796,739 in 1898 and £3,748,766 in 1899; of machinery, £18,389,973 in 1898 and £19,650,881 in 1899; of coal, pressed fuel, etc., £18,135,502 in 1898 and £23,105,691 in 1899. The value of goods transhipped in transit in 1898 was £9,792,635, against £10,752,108 in 1897, and £10,266,379 in 1896. The value of gold imports in 1899 was £32,533,497, and of gold exports £21,536,052; of silver

imports £12,727,989 and of silver exports £13,955,132. In 1898 the gold imports were £43,722,960 and exports £36,590,050, the silver imports £14,677,799 and exports £15,623,651. In 1897 the gold imports were £30,808,858 and exports £30,808,571, the silver imports £18,032,090 and exports £18,780,988. In 1896 the gold imports were £24,468,337 and exports £30,123,925, the silver imports £14,329,116 and exports £15,048,134.

Navigation.—The total number of vessels that entered the ports of the United Kingdom during 1898 was 358,030, of 100,547,373 tons; the total number cleared, 355,107, of 100,300,683 tons. This includes 293,285, of 55,422,029 tons, entered coastwise and 290,688 coasting vessels, of 54,462,061 tons, cleared. The number of vessels engaged in foreign commerce entered at British and Irish ports during 1898 was 64,745, of 45,125,000 tons, of which 38,722, of 31,857,000 tons, were British and 26,023, of 13,268,000 tons, were foreign. The number cleared was 64,419, of 45,839,000 tons, of which 38,360, of 32,360,000 tons, were British and 26,059, of 13,479,000 tons, were foreign. The tonnage of vessels entered with cargoes was 34,516,000, of which 25,172,000 tons were British and 9,344,000 tons were foreign. The tonnage cleared with cargoes was 39,463,000, of which 27,959,000 tons were British and 11,503,000 tons foreign. The total tonnage entered and cleared was 73,979,000, and of this 53,131,000 tons were British. The foreign tonnage entered and cleared with cargoes amounted to 20,847,000 tons. With cargoes and in ballast the total foreign tonnage entered and cleared was 26,747,238, and of this Norway had 6,604,693 tons, Germany 4,539,912 tons, Denmark 2,828,918 tons, Sweden 2,728,160 tons, the Netherlands 2,614,124 tons, France 2,027,726 tons, Spain 1,377,669 tons, Belgium 1,404,946 tons, Russia 790,397 tons, Italy 643,926 tons, the United States 314,445 tons, and Austria-Hungary 247,790 tons. The tonnage entered and cleared at the port of London was 15,003,187 tons; at Liverpool, 11,373,277 tons; at Cardiff, 7,887,097 tons; at Newcastle, 5,218,879 tons; at Hull, 4,237,958 tons; at Glasgow, 3,527,277 tons; at Southampton, 2,843,406 tons; at North and South Shields, 2,372,041 tons; at Leith, 1,835,444 tons; at Sunderland, 1,806,202 tons; at Middlesbrough, 1,708,011 tons; at Swansea, 1,659,696 tons; at Grimsby, 1,654,980 tons; at Kirkcaldy, 1,515,467 tons; at Newport, 1,497,192 tons; at Grangemouth, 1,345,120 tons; at Bristol, 1,076,875 tons; at Manchester, 1,041,528 tons; at Hartlepool, 696,416 tons; at Belfast, 513,509 tons; at Dundee, 260,321 tons.

The number of vessels registered as belonging to the United Kingdom on Jan. 1, 1899, was 20,404, of 9,001,860 tons, of which 11,556, of 2,387,943 tons, were sailing vessels and 8,838, of 6,613,917 tons, were steamers. The number of vessels engaged in the home and foreign trade in 1898 was 15,207, of 9,080,728 tons. The number of seamen employed was 242,553, of whom 35,308 were foreigners. The total number of vessels belonging to the British Empire was 35,000, of 10,460,643 tons. The number of vessels built and first registered during 1898 was 1,370, of 695,997 tons, of which 665, of 41,839 tons, were sailing vessels and 705, of 654,158 tons, were steamers. Besides these 179 merchant vessels, of 167,879 tons, were built by foreigners, comprising 31 sailing vessels, of 3,051 tons, and 148 steamers, of 164,828 tons. Of the total number of vessels belonging to the United Kingdom, 6,521 sailing vessels, of 407,620 tons, and 3,102 steamers, of 438,382 tons, were employed in the home trade and the coasting trade between the mouth of the Elbe and Brest; 199 sailing vessels, of 26,174 tons, and 320 steamers,

of 265,144 tons, were employed partly in the home and partly in the foreign trade; and 1,388 sailing vessels, of 1,878,896 tons, and 3,677 steamers, of 6,064,506 tons, were employed in the foreign trade altogether. The crews of the sailing vessels in the home trade numbered 26,989 men, in those partly in the foreign trade 1,115 men, of those in the foreign trade alone 31,063, of the steamers in the home trade, 35,682 men, of those partly in the foreign trade 6,722 men, of those in the foreign trade alone, 140,982 men.

Railroads, Posts, and Telegraphs.—The total length of railroads open to traffic in the United Kingdom on Jan. 1, 1899, was 21,659 miles, of which 15,007 miles were in England and Wales, 3,476 miles in Scotland, and 3,176 miles in Ireland. The paid-up share and loan capital amounted to £1,134,468,462. The number of passengers carried during 1898 was 1,062,911,116, exclusive of holders of season tickets. The receipts from all sources were £96,252,501, of which £41,847,074 came from passengers and £49,218,964 from freight. The working expenses were £55,960,543, being 58 per cent. of the gross receipts. There were on June 30, 1898, 1,064 miles of tramways, the receipts of which for the year were £4,560,126 and expenses £3,507,895; number of passengers carried, 858,485,542; paid-up capital, £15,920,404; net receipts, £1,052,231.

The number of letters that passed through the British post office during the year ending March 31, 1899, was 2,186,800,000, of which 1,859,700,000 were delivered in England and Wales, 190,600,000 in Scotland, and 136,500,000 in Ireland, being 54 letters per head of population for the whole United Kingdom, 59 letters per head in England and Wales, 45 per head in Scotland, and 30 per head in Ireland. The number of postal cards carried by the post office in 1899 was 382,200,000; book packets, 701,500,000; newspapers, 154,100,000; parcels, 71,900,000; money orders, 11,475,201; for the total amount of £33,278,517, of which 9,721,047, for £28,604,078, were inland orders; of postal orders, 76,755,217, for the gross amount of £27,217,436. The receipts of the postal service were £13,049,317 and the expenses £9,194,437, leaving a net revenue of £3,854,880. The telegraph receipts were £3,260,145 and expenses £3,477,949, leaving a deficit of £217,804, not including £298,888 interest on the debt created for the purchase of the telegraph lines in 1870. The telegraph lines had on March 31, 1899, a total length of 43,803 miles, with 309,029 miles of wire. The number of messages sent during the year was 87,043,652, of which 73,249,702 were sent in England and Wales, 9,064,629 in Scotland, and 4,729,321 in Ireland.

Dependencies.—The total area of the British Empire was estimated in 1899 at 11,726,217 square miles and the total population at 385,782,293. The area and population of British colonies is given in the table on page 278.

The area of the colonies added to that of the United Kingdom and India makes 9,445,017 square miles, with a total population of 349,552,293. The British protectorates in Africa have an estimated area of 2,160,000 square miles, with 35,000,000 population; protectorates in the Pacific, 800 square miles, with 30,000 population; protectorates in Asia, 120,400 square miles, with 1,200,000 population; total area of protectorates, 2,281,200 square miles, with 36,230,000 population.

The colonies and dependencies not elsewhere treated of (see AUSTRALASIA, BRITISH COLUMBIA, CANADA, CAPE COLONY, EAST AFRICA, INDIA, NEWFOUNDLAND, WEST AFRICA, WEST INDIES) are described below.

COLONIES.	Square miles.	Population.
Gibraltar.....	2	24,093
Malta and Gozo.....	117	180,328
Aden and Perim.....	119	204,421
Ceylon.....	25,333	3,448,752
Hong-Kong.....	406	354,400
Labuan.....	30	5,853
Straits Settlements.....	1,472	512,342
Ascension.....	35	430
Cape Colony.....	276,775	1,787,960
Natal.....	35,019	906,365
Basutoland.....	10,293	250,000
Mauritius.....	705	337,856
Gambia.....	69	14,300
Gold Coast.....	40,000	1,473,882
Lagos.....	985	85,607
Sierra Leone.....	4,000	74,835
St. Helena.....	47	4,545
Canada.....	3,653,946	5,185,990
Newfoundland and Labrador.....	162,200	202,040
British Guiana.....	109,000	286,222
British Honduras.....	7,562	84,747
Falkland Islands and South Georgia..	7,500	2,050
Bahamas.....	4,466	53,256
Jamaica and Turk's Island.....	4,359	733,118
Barbadoes.....	166	190,000
Leeward Islands.....	701	127,800
Windward Islands.....	784	155,000
Trinidad and Tobago.....	1,868	273,655
Bermudas.....	20	16,391
New South Wales.....	310,700	1,357,050
Victoria.....	87,890	1,176,854
Queensland.....	668,500	498,523
South Australia.....	908,690	362,897
Western Australia.....	975,920	168,490
Tasmania.....	26,390	177,340
New Guinea.....	90,540	350,000
Fiji.....	7,740	121,738
New Zealand.....	104,470	796,399
Total.....	7,523,790	21,768,908

Gibraltar is a Crown colony and military and naval station at the entrance of the Mediterranean. The Governor, Gen. Sir Robert Biddulph in 1900, is commander in chief and has full executive and legislative power. The area is about 2 square miles, containing 24,093 inhabitants in 1898, including the garrison of 4,065 men. The local revenue in 1898 was £56,019; expenditure, £48,878; military expenditure of the British Government, £256,552.

Malta is a naval and refitting station in the Mediterranean and an important port of call. Owing to its malarial climate and the smallness of the harbor it has been partly superseded as a naval base by Gibraltar, where enormous docks have been made. Lieut.-Gen. Sir Francis Wallace Grenfell was Governor in 1900. The revenue in 1898 was £332,488; expenditure, £339,082. Cotton, potatoes, oranges, figs, honey, and corn are produced and cotton cloth, filigree, and matches are manufactured. The imports in 1898 were valued at £10,025,131, and exports at £9,379,140; but it was mainly transit trade, the imports for home consumption being only £828,567. Vessels entered, 3,890, of 3,563,728 tons; cleared, 3,874, of 3,581,993 tons. There are 8 miles of railroads, 65 miles of telegraphs, and 360 miles of telephones. The area of the island, with Gozo and Comino, is 117 square miles; population, 180,328.

Cyprus, an island off the coast of Syria, is administered by Great Britain under a convention concluded with Turkey on June 4, 1878. The High Commissioner, Sir William F. Haynes Smith in 1900, is assisted by a Legislative Council composed of 6 official members, 9 members elected by the Christian population, and 3 members elected by Mohammedans. The Christians, mostly Greek Orthodox, numbered 161,360 in 1891 and the Mohammedans 47,926. The birth rate is 33.4 per mille; death rate, 24. The revenue for the year ending March 31, 1899, was £210,284; expenditure, £132,973. Tithes of produce paid in kind, land and house taxes, taxes on trade profits, the

military exemption tax, a tax on sheep, goats, and pigs, customs, excise, stamps, fees, and the salt monopoly, supply the revenue as under Turkish rule. The sum of £92,000 is paid annually to Turkey under the convention. The public debt consists of an advance from the British treasury in 1899 of £314,000 for harbors, railroads, and irrigation. A grant of £33,000 was voted by Parliament in 1899 in aid of revenue. The principal products are wheat, barley, olives, cottons, wine, raisins, fruits, vegetables, carobs, linseed, cocoons, cheese, wool, and hides. There were 62,174 horses and asses, 47,242 cattle, 289,155 sheep, and 265,766 goats in 1898. There are valuable gypsum quarries and a sponge fishery yielding £30,000 per annum to sponge fishers from other countries. The value of imports in 1899 was £288,258; exports, £343,687.

Aden, a volcanic peninsula on the Arabian coast near the Strait of Bab el Mandeb, is a strongly fortified coaling station on the Suez Canal route to the East. The island of Perim, at the entrance of the Red Sea, and a part of the mainland opposite belong to the colony, which is administered under the direction of the Governor of Bombay by a political Resident, who has command of the troops. The area is 75 square miles, and that of Perim 5 square miles; population, 41,010. Coffee and tobacco, partly the produce of Arabia, and gums and skins from the opposite African coast, are exported. The imports by sea in 1899 were 38,992,999 rupees in value; by land, 1,651,236 rupees; exports by sea, 31,638,659 rupees; by land, 1,651,236 rupees; precious metals, 5,191,961 rupees. The number of vessels entered in 1899 was 1,395, of 2,636,294 tons, not counting 1,527 dhows, of 47,325 tons. The local revenue, derived from liquor, opium, and salt, was £388,507 in 1899; expenditure, £387,960. The island of Sokotra, off the coast of Africa, 1,382 square miles in extent with 12,000 inhabitants, pastoral nomads and fisher folk, producing dates, gums, sheep, goats, and cattle, is attached to Aden. So, also, are the Kuria Muria Islands, near the coast of Arabia a cable landing, yielding only guano.

The *Bahrain Islands*, in the Persian Gulf, where there are valuable pearl fisheries, are a British protectorate. The area is about 200 square miles, the population 25,000. The imports in 1898 were valued at £551,728; exports, £496,305.

British North Borneo, a protectorate administered by a chartered company, has an area of 31,106 square miles and about 175,000 inhabitants. The protectorate has been extended over Tambunan, about 500 square miles in extent, with 25,000 inhabitants. The jurisdiction of the Governor, Hugh Charles Clifford in 1900, extends also over the island of Labuan, which has an area of 50 square miles and 5,853 inhabitants. The Government has granted large tracts in North Borneo on perpetual leases to planters of Sumatra tobacco, coffee, coconut palms, Manila hemp, pepper, and gambier. The revenue in 1898 was £503,307 from ordinary sources and £2,214 from sales of land and expenditure, £387,261. The imports were £2,881,851 in value; exports, £2,419,087. The value of tobacco was £1,388,066. Other exports are timber, sago, rattan, gutta-percha, gums, coffee, wax, trepang, edible birds' nests, pepper, and gambier. There is a military force of 350 native soldiers. The sultanate of Brunei, 15,000 square miles in extent, with 45,000 inhabitants, and the territory of Sarawak, 50,000 square miles in extent, with 500,000 inhabitants, are under British protection. The products of Sarawak are the same as in North Borneo. Coal is mined and exported. The total value of imports in 1898 was £4,488,497; exports,

4,086,401. The revenue was £638,188; expenditure, £543,506. The military force is 250 men. Import duties are levied on kerosene, spirits, tobacco, and salt, and export duties on gambier, ginseng, and other products, and dried fish.

Ceylon has a representative system of government, and in the Legislative Council of 17 members are 8 representatives of different races and classes of the population. The Governor in 1900 was Sir Joseph West Ridgeway. The area is 25,333 square miles, and the population was estimated in 1898 as 3,448,752, consisting of 6,577 Europeans, 24,071 Sinhalese, 993,856 Tamils, including recent immigrants from southern India, 11,110 Malays, 207,425 Moors or Mohammedans other than Malays, 810 Siddhahs, the remnant of the aborigines, and 8,947 others. The birth rate is 38.2, the death rate 22.2 per mille. The once flourishing coffee plantations have disappeared; now the tea culture is flourishing, and the English planters have developed the most advanced and scientific mechanical processes for treating the leaf. Tamils are brought over from India to work on the plantations for a fixed term of years. The arrivals in 1898 were 8,864; departures, 105,706. The revenue for 1898 was 25,138,669 rupees; expenditure, 22,843,852 rupees. The population of Colombo, the capital, is about 30,000. The naval station of Trincomalee, on the east coast, is the headquarters of the British fleet in Indian waters. The colony pays to the Imperial Government 1,884,934 rupees a year as the cost of the military garrison. Of the total area of 16,233,000 acres, 2,231,948 acres are cultivated and 826,427 acres are pasture land, feeding 27 horses, 1,310,447 cattle, 83,620 sheep, and 3,987 goats. The tea plantations occupy 424,856 acres; rice and other grains, 753,872 acres; coconut plantations, 864,296 acres; coffee plantations, 1,023 acres; cinnamon plantations, 46,117 acres; cacao plantations, 33,260 acres; tobacco plantations, 11,127 acres. There are 1,692 plumbago mines and 412 mines for precious stones. The total value of imports in 1898 was 97,893,059 rupees, and of exports 95,097,692 rupees. Rice and grain, oil, cotton goods, salt fish, and spirits are the leading imports. The export of tea was valued at 734,252 rupees; coconut products, 16,904,955 rupees; plumbago, 7,174,770 rupees; areca nuts, 60,838 rupees; coffee, 878,693 rupees. The exports of coffee, owing to the ravages of disease among the plants, fell from 824,509 hundredweight in 1879 to 12,692 hundredweight in 1898, while those of tea increased from 2,392,975 pounds in 1874 to 122,395,518 pounds in 1898. The export of cacao has increased from 7,466 hundredweight in 1885 to 38,099 hundredweight in 1898. In 1899 the revenue of 25,913,141 rupees was collected, giving a surplus of 962,202 rupees over expenditure. In 1900 a still greater increase of revenue was obtained, and for 1901 it was estimated at 26,320,000 rupees.

Hong-Kong, a Crown colony, was acquired from China in 1841. The Governor in 1900 was Sir Henry A. Blake. The peninsula of Kaulung, opposite the island of Hong-Kong, was ceded to Great Britain in 1861, and in 1898 an extension inland embracing about 400 square miles, with 100,000 inhabitants, was leased for ninety-nine years. The new territory was occupied in August, 1899. The estimated population of the old settlement was 450,400 in 1898, of whom 15,190 were whites, including about 7,000 of Portuguese origin. There were about 5,000 British, and the rest were Germans, Americans, French, Spanish, Italians, Turks, etc. The police and military are largely composed of East Indians. The male whites outnumber the

females more than three to one, and the discrepancy is nearly as great among the Chinese. There is a constant immigration from China and an emigration of Chinese to various parts of the world. The arrivals of Chinese in 1898 numbered 60,432; departures, 105,441. The ordinary revenue in 1898 was £2,672,107; premiums from land and water account, £246,050; ordinary expenditure, £2,607,424; expenditure for defensive works and water account, £234,381. The receipts from land tax, licenses, and the opium monopoly exceed the expenses of administration, but the maintenance of a strong body of police requires a heavy expenditure. The public debt of £341,800 was incurred for water works, fortifications, and sanitary works. The military contribution of the colony in 1898 was £519,275. Hong-Kong is the center of the Indian opium trade with China, and to a great extent of the Chinese tea and silk export trade and of the import trade in cotton goods, kerosene, flour, and all kinds of Western products and manufactures; also of the trade in salt, earthenware, amber, sandalwood, ivory, betel, sugar, and many other articles. It is a free port and keeps no record of imports and exports. Of British manufactures £1,224,158 worth of cotton goods and yarns were imported in 1898, £210,618 worth of woolen goods, £208,534 worth of iron, £77,058 worth of machinery, and £25,684 worth of copper. The exports to Great Britain of tea were valued at £80,821; of silk, £134,647; of hemp, £270,990; of preserved fruits, £42,966. The merchant shipping of the colony on Jan. 1, 1899, consisted of 23 sailing vessels, of 6,928 tons, and 37 steamers, of 19,555 tons. The number of vessels entered during 1898 was 5,539, of 6,539,702 tons, not counting 29,466 junks, of 1,814,281 tons. There are about 52,000 native vessels in Hong-Kong, of 1,300,000 tons. A mint has been established, in which \$1,421,487 in silver dollars and half dollars have been coined. The total coin in circulation—Mexican, Chinese, and British—is about \$22,000,000, and the bank notes amount to \$10,000,000. Hong-Kong is the headquarters of the British fleet on the China station. The dockyard is being extended.

Wei-Hai-Wei, a naval harbor on the peninsula of Shantung, was leased to Great Britain on July 1, 1898, for a period to be determined by the termination of Russia's occupation of Port Arthur. The lease includes the port and bay, with the islands in the bay, and a strip of 10 miles inland from the shore. The old defenses were destroyed by the Japanese. New fortifications are being constructed on the island of Liu-Kung. A Chinese regiment has been recruited and trained, to form with a British contingent the permanent garrison. In a zone beyond the limit of British jurisdiction Great Britain has the right to erect defensive works and acquire sites for water supply and communications.

The *Straits Settlements*, comprising Singapore, Penang, and Malacca, form a Crown colony which was taken away from the control of the Indian Government in 1867. Sir F. A. Swettenham, Resident General for the Federated Malay States, is acting Governor. The island of Singapore has an area of 206 square miles; the island of Penang, 107 square miles; Province Wellesley, on the western side of the Malayan peninsula, 270 square miles; Malacca, on the western coast also, about 512 square miles; the Dindings, 389 square miles. The population of Singapore in 1891 was 184,554; of Penang, 235,618; of Malacca, 92,170; total, 512,342, comprising 5,290 European males and 1,299 females, 3,409 Eurasian males and 3,648 females, and 335,852 Asiatic males and 162,844 females.

The Asiatic population consisted of 213,073 Malays, 227,989 Chinese, and 53,927 natives of India. The number of Chinese immigrants in 1898 was 150,529; of Indian immigrants, 19,026, of whom 2,989 were indentured; returned to India, 11,500. The revenue of the colony in 1898 was \$5,071,282; expenditure, \$4,587,372. There are no duties levied on either imports or exports, and the trade of Singapore is principally in transshipment of the products of the islands of the Indian Archipelago and those of the Malayan peninsula and of goods destined for those places. The value of the imports in 1898 was \$248,110,547, of which \$31,904,104 came from Great Britain, \$84,570,258 from British possessions, and \$131,636,125 from other countries; value of exports, \$212,308,029, of which \$28,385,028 went to Great Britain, \$33,580,296 to British possessions, and \$150,342,705 to other countries. The principal exports are tin, sugar, pepper, nutmegs, mace, sago, tapioca, rice, buffalo hides, rattan, gutta-percha, rubber, gambier, gums, copra, coffee, dyes, and tobacco. Rice was imported of the value of \$28,059,813; cotton cloth, \$13,396,302; opium, \$10,129,302; fish, \$5,774,730; coal, \$5,066,640; tobacco, \$4,347,915; kerosene, \$1,967,992. The value of tin exported was \$32,296,134; spices, \$12,555,422; gums, \$12,808,503; sago and tapioca, \$5,537,661; gambier, \$5,847,282; copra, \$4,910,205; rattan, \$4,083,597. The number of vessels entered during 1898 was 8,922, of 6,331,790 tons, exclusive of 15,509 native vessels, of 604,751 tons; the number of vessels cleared was 8,915, of 6,329,652 tons, exclusive of 15,601 native craft, of 616,357 tons. The post office received 3,238,110 letters, etc., in 1898 and dispatched 3,422,858. The standard of value is the Mexican dollar, as proclaimed in 1895, and the British and Hong-Kong dollars are also legal tender. The export of tin from Perak amounted in 1898 to 19,703 tons; from Selangor, 16,301 tons; from Negri Sembilan, 2,455 tons. Mines are worked also in Pahang. The tin exported from the protected states in 1899 was valued at \$46,139,399, and besides this coffee was exported for \$530,232 and sugar for \$1,283,165. The total value of exports reached \$54,895,139, while the imports were valued at \$33,765,073. With the growth of commerce the revenue keeps pace, amounting to \$13,486,410 in 1899, compared with \$9,364,467 in 1898 and \$8,434,083 in 1896, the first year of federation, while in 1891 the combined revenues of the 4 states amounted to \$4,572,310. The increased value of exports is mainly attributable to the high price of tin, also the remarkable expansion of revenue, as the export duty is a progressive one, higher in proportion to value when the price of tin is higher. A regiment of native riflemen has been raised. The police force consists of 2,000 Malays, Sikhs, and Punjabis. Lands have been sold to planters under an enactment of 1897, and the revenue obtained from this source was \$730,013 in 1899. The Europeans have planted cocoanut palms and rubber as well as coffee, and are endeavoring to get laborers from India. Alluvial tin is obtained by hydraulic mining. Companies have been formed recently to dredge the rivers for either tin or gold. Laborers have become so scarce, both for public works and private enterprises, that double or treble the former wages are paid for either Chinese or Indian labor. The Tamils of India can not be induced to immigrate even by a free passage and high wages, and for Chinese laborers engaged for a term of years the Government offers a bounty of \$5 a head.

The Federated Malay States of Perak, Selangor, Negri Sembilan, and Pahang are under British protection. British Residents, assisted by a staff

of European officers, aid and direct the native authorities, the supreme legislative and executive functions being vested in each state in the State Council, composed of the superior British and native officials. The area of Perak is about 10,000 square miles, with 214,254 inhabitants; Selangor, 3,500 square miles, with 81,592 inhabitants; Negri Sembilan, comprising Sri Menanti, Johol, Jelebu, Rembau, and Tampin, 3,000 square miles, with 41,617 inhabitants; besides 23,602 in Sungei Ujong, which was placed under the same Resident in 1895; Pahang, 10,000 square miles, with 57,462 inhabitants. By a treaty concluded in July, 1896, the 4 protected states were federated under the general administration of a Resident General, and the states agreed to furnish troops for the defense of the colony in the event of a war between Great Britain and any foreign power. The state of Johor, having an area of about 9,000 square miles and 200,000 population, placed its foreign relations in the hands of the British Government in 1885. Coffee of the Liberian variety, pepper, sugar, rice, gambier, sago, and tapioca are produced in the native states and in British territory, and the states on the western coast of the peninsula furnish a great part of the world's supply of tin. The mines are owned and worked mostly by Chinese, and the duty on exports of tin yields the bulk of the abundant revenue of the natives states. Gold is also obtained, and 22,160 ounces were exported from Pahang alone in 1898. The revenue of Perak in 1898 was \$4,575,842, and expenditure \$5,560,529; revenue of Selangor \$3,802,439, and expenditure \$4,470,843; revenue of Negri Sembilan \$701,334, and expenditure \$730,859; revenue of Pahang \$224,856, and expenditure \$372,719.

Mauritius, an island in the Indian Ocean east of Madagascar, was a French colony before the Napoleonic wars. The Governor, Sir Charles Bruce in 1900, is assisted by a Council of Government consisting of 27 members, of whom 10 are elected. Of the estimated population of 378,872 on Dec. 31, 1898, the general population numbered 117,650, including 3,389 Chinese. The creoles of French extraction are the original proprietors, and the bulk of the fixed population consists of African natives and mixed races. The Indian coolies and other laborers working under indentures on the sugar plantations or settled in the island numbered 261,222. The population at the end of 1899 was 379,659, and of the total 261,739 were Indians, of whom 62,387 were immigrants and the rest were born in the island. The number of arrivals in 1897 was 426; of departures, 917. The property in St. Louis, the capital, which had 55,645 inhabitants, and the lands of the island are rapidly passing into the possession of East Indians and Chinese. The revenue in 1898 was 7,620,320 rupees; expenditure, 8,131,470 rupees; debt, £1,195,690. The merchandise imports in 1898 were valued at 24,006,970 rupees; exports, 27,537,930 rupees. The chief exports were raw sugar, 24,727,690 rupees; rum, 85,800 rupees; vanilla, 140,100 rupees; aloe fiber, 427,130 rupees; cocoanut oil, 59,180 rupees. The trade is mainly with South Africa, Australia, and India. The number of vessels entered in 1898 was 302, of 327,246 tons; cleared, 293, of 328,298 tons. The length of railroads is 105 miles, and there are 135 miles of telegraph and cable communication with Zanzibar. The postal traffic in 1898 was 1,296,408 letters, 51,444 postal cards, 1,432,114 newspapers, and 9,246 parcels. The number of telegrams was 62,552. Dependencies of Mauritius are the Seychelles, containing a population of 16,440 and exporting cocoanut oil, soap, vanilla, tortoise shell, coffee,

and cacao; Rodrigues, with a population of 2,870; Argados Islands, the Eagle and Cosmoledo groups, and the Chagos Islands, the largest of which is Diego Garcia, which exports 4,813 hectolitres of coconut oil. The sugar crop of Mauritius has been increased by the transfer of small holdings to the Indian population, and the yield of sugar has been improved by the use of modern machinery. The imposition of countervailing duties on duty-free sugar by the United States, India, and Canada has benefited the export trade, and this has reacted on the revenue, which exceeded 100,000 rupees in 1899, a part of the increase being due to higher taxation. The imports exceeded 20,000,000 rupees in 1899 and the exports 750,000 rupees. The plague was introduced from Madagascar early in 1899, and spread through the island in spite of vigorous measures of disinfection, the destruction of rats, and general sanitation.

The *Cook Islands*, in the Pacific, were formally annexed on Oct. 10, 1900. Among their population are 2,300 Maoris and 70 Europeans. The volcanic soil is exceedingly fertile, producing coffee, cacao, cotton, coconuts, oranges, limes, and tropical fruits with little cultivation. A British protectorate was declared in 1888, and since 1902 the New Zealand Government, to which they are now subordinated, has supported a Resident. This group of small islands, of which Raratonga, Ngaiia, and Atui are the chief ones, contains in the Hervey Islands 8,400 inhabitants on the area of 142 square miles. *Pitcairn Island* has 10 inhabitants. The *Manihiki Islands*, 12 square miles in extent, have a population of 1,000. The *McKean Islands*, with 7 square miles of area, contain 1,050 people. The *Phoenix Islands*, 16 square miles in area, have 59. The *Ellice Islands* are 2,400 on an area of 14 square miles. The *Norfolk Islands*, on an area of 166 square miles, have a population of 35,200. The British part of the *Solomon Islands*, over which a protectorate was proclaimed in 1897, had an area of 8,357 square miles. Choiseul and Isabel, with neighboring groups and islets, were transferred by Germany to Great Britain by the Samoan agreement of 1899. They produce copra, tortoise shell, and dry nuts, and coffee plantations have been tried. The natives are often engaged for a term of years to work on other islands.

Christmas Island has an area of 234 square miles and 100 inhabitants. *Malden Island*, with an area of 35 square miles, has 168. *Jarvis Island*, 1,200 square miles in extent, has 30. *Fanning Island*, with an area of 15 square miles, has 10. Other coral or guano islands and groups annexed by Great Britain are the *Santa Cruz*, *Duff* groups, *Starbuck* and *Washington* groups, *Palmyra*, *Sugarloaf Islands*, *Dudooza*, *Gerard Island*, *Campbell Island*, *Macquarie Island*, and the *Antipodes* and *Bounty Islands*. Coconut trees are abundant on most of them.

High Commissioner for the Western Pacific, G. T. M. O'Brien, has jurisdiction over all them and over any others that are not under the dominion of a civilized power for the purpose of adjudicating disputes between British subjects and natives of protecting the natives from being carried by force to work on plantations or from other oppression. *Tonga*, which was declared neutral by the Berlin declaration of April 6, 1886, was acquired to British control by the Anglo-German Samoan agreement of Nov. 14, 1899, subsequently accepted by the United States. The *Tonga*, *Haapai*, and *Vavau* groups, formerly known as the *Friendly Islands*, lying east of Fiji, are a native kingdom, whose sovereign is George

II, born June 18, 1874. There is a Legislative Assembly, half of hereditary nobles, removable for cause, and half of elected representatives of the people. The area of the kingdom is 374 square miles; the population in 1893 was 17,500, including 250 foreigners, most of them British. The revenue, obtained mainly from customs duties, a poll tax, and leases of land, is about \$125,000 a year, the expenditure a little less. The imports in 1898 were valued at £35,176, exports at £39,404, of which £29,610 represent copra and £3,264 fruit. The tonnage entered in 1898 was 81,100, of which 74,388 tons were British, 5,177 tons Norwegian, 931 tons German, and 604 tons Danish. A British protectorate was proclaimed over Tonga on May 19, 1900. Sites for a coaling station and a fortified harbor were selected at Vavau. The King would not agree to a protectorate except against foreign powers, and insisted that the sovereignty should be guaranteed to himself and his successors. Basil Thomson, who was sent out as British Commissioner to the Tonga Islands, could offer no guarantee, but decided that the acceptance of British help in case of difficulty with foreign powers constituted a protectorate, and concluded a treaty by which the King agreed to make no treaties with other powers without the consent of the British Government, and to apply for British assistance only in any trouble. He was supported by the House of Nobles in his refusal to accept a more complete form of protectorate. Jurisdiction over Europeans, however, was conceded to the British court of law, and the two naval harbors were granted. The Tongans have retained the ownership of the land, none of which is occupied by Europeans except under lease, and they are proud of the independence which they alone of the races of the Pacific who were taught civilized methods of government by the missionaries have succeeded in preserving.

Ascension is an island in the Atlantic used as a coaling and victualing station for the British squadron on the west coast of Africa.

St. Helena, formerly important as a port of call on the Cape route, is a coaling station for naval vessels on the Cape and West African stations. The revenue in 1898 was £9,152; expenditure, £12,349.

Tristan da Cunha, a group of islands in the south Atlantic, is inhabited by the families of shipwrecked sailors, who got their wives from St. Helena. They numbered only 64 persons in 1897.

The *Falkland Islands*, east of the Straits of Magellan, have in proportion to their population a large trade in wool. They are a Crown colony, having a land surface of 6,500 square miles, with 2,050 inhabitants. The revenue in 1898 was £13,039; expenditure, £14,278. The imports were £72,987 in value; exports, £106,984. Of the total trade 94 per cent. is with Great Britain. There are 2,325,154 acres of pasturage; on which 732,010 sheep were kept in 1898, with 2,758 horses and 7,343 cattle. Live animals were exported to England in 1898, but the enterprise was abandoned or interrupted.

The *Bermudas*, 580 miles from Cape Hatteras, are a group of small islands having a total area of 20 square miles, one third of it under cultivation. The population was 16,219 in 1898, of whom 6,239 were whites. The number of marriages during the year was 143; of births, 613; of deaths, 378. The Governor in 1900 was Lieut.-Gen. G. Digby Barker. There is a Legislative Assembly of 36 members. The trade is with the United States and Canada, whence provisions and breadstuffs are brought to feed the people and whither are shipped in winter and spring potatoes, onions,

and tomatoes. The bulbs and plants of the Easter lily are also an important article of export. The value of imports in 1898 was £113,903; exports, £351,274, the value of onions being £58,373, of potatoes £19,955, and of lily bulbs £15,452. The tonnage entered and cleared was 471,956, of which 409,751 tons were British. The shipping of the colony consisted of 2 steamers, of 651 tons, and 23 sailing vessels, of 5,460 tons. There are 36 miles of land telegraph, 15 miles of cable, and 700 miles of telephone wire. A cable connects Bermuda with Jamaica.

British Guiana is administered by a Governor, Sir Walter J. Sendall in 1900, assisted by a Court of Policy, consisting of 7 official and 8 elected members. Taxes and expenditures are voted by the combined court, composed in addition to these of 6 financial members elected by the registered voters, who numbered 2,815 in 1899. The Roman Dutch law is in force in civil cases, while the criminal jurisprudence is based on that of England. Of 278,328 population enumerated in 1898 there were 99,615 of negro blood, 105,465 East Indians, most of them coolies, 3,714 Chinese, and 2,533 born in Europe. The number of births in 1898 was 8,500; of deaths, 9,706. The revenue for 1899 was £525,865; expenditure, £525,387. Of the revenue £304,366 came from customs, £85,548 from licenses, £34,292 from the duty on rum, and £21,209 from the royalty on gold. The public debt amounts to £975,791. The sugar estates, 74 in number, had an area in 1891 of 69,814 acres, on which 90,402 persons were living. Gold mining began in 1886, and in ten years £2,796,300 worth of gold was taken out. In 1897 the product was 126,702 ounces; in 1898, 125,080 ounces; in 1899, 112,464 ounces. Cloth, flour, rice, fertilizers, hardware, fish, machinery, and coal are the principal imports. The total value of imports in the year ending March 31, 1899, was £1,371,412; exports, £1,775,691. The export of sugar was £1,040,982; of molasses, £11,968; of rum, £144,712; of gold, £415,746. There are 40 miles of railroad. The tonnage entered and cleared in 1899 was 632,090. The shipping of the colony consisted of 15 steamers, of 1,171 tons, and 33 sailing vessels, of 1,682 tons. The telegraphs have a length of 559 miles; telephones, 677 miles.

British Honduras is a Crown colony south of Yucatan. The population of 34,747, as computed in 1897, consisted of 481 whites and 34,266 colored. The number of marriages in 1898 was 281; of births, 1,469; of deaths, 1,146. The Governor is Col. Sir David Wilson. The revenue for 1898 was \$274,690; expenditure, \$301,413. Customs and excise duties, license fees, the land tax, and sales and leases of Crown lands furnish the revenue. The debt was \$168,815 in 1898. The value of imports in 1898 was \$1,248,910; exports, \$1,282,593, consisting, besides mahogany and logwood, which have always been the staple products of the country, of bananas, plantains, and coconuts shipped to New Orleans. Coffee, rubber, and sarsaparilla, the products of Yucatan, are also shipped from the port of Belize. There were 618 vessels, of 183,332 tons, entered and 609, of 153,552 tons, cleared during 1898. The shipping of the colony consisted of 225 sailing vessels, of 4,950 tons, and 7 steamers, of 1,992 tons. United States gold has been the legal standard currency since 1894.

Preservation of Wild Animals in Africa.—Representatives of England, France, Germany, Italy, Portugal, and Spain, and of the King of the Belgians acting for the Independent State of the Congo, met in London, and on May 19, 1900, signed a convention for the protection of wild animals in Africa between 20° of north latitude

and the Zambesi. It is not allowable to hunt or destroy vultures, owls, secretary birds, or rhinoceros birds, on account of their usefulness, or giraffes, gorillas, chimpanzees, mountain zebras, wild asses, white-tailed gnus, elands, or the little Liberian hippopotamus, on account of their rarity, and the prohibition may be extended to other useful or rare species threatened with extermination. The hunting or destruction is prohibited of young elephants, rhinoceroses, hippopotamuses, zebras, buffaloes, ibexes, chevrotains, and antelopes and gazelles of the genera *Bubalis*, *Damaliscus*, *Connochætes*, *Cephalophus*, *Oreotragus*, *Oribia*, *Raphiceros*, *Nesotragus*, *Madoqua*, *Cobus*, *Cervicapra*, *Pelea*, *Æpyceros*, *Antidorcas*, *Gazella*, *Ammodorcas*, *Lithocranius*, *Dorcotragus*, *Oryx*, *Addax*, *Hippotragus*, *Taurotragus*, *Strepsiceros*, and *Tragelaphus*; also of females of any of these species when accompanied by their young or of any females that can be recognized as such. Of adult males of the same species only limited numbers may be killed, and the restriction is extended to various pigs, colobi and all the fur monkeys, aardvarks, dugongs, manatees, small cats, servals, cheetahs, jackals, aardwolves, small monkeys, ostriches, marabouts, egrets, bustards, francolins, guinea fowls and other game birds, and large tortoises. Harmful animals, of which it is desired to reduce the numbers within sufficient limits, may be hunted, and measures will be applied to effect their reduction. In this category are lions, leopards, hyenas, the hunting dogs, otters, baboons and harmful monkeys, large birds of prey except vultures, secretary birds, and owls, crocodiles, poisonous snakes, and pythons. Measures will be taken to destroy the eggs of crocodiles, poisonous snakes, and pythons, to insure the protection of ostrich eggs, and to supervise sick cattle in order to prevent the transmission of contagious diseases to wild animals. Export duties will be imposed on skins of giraffes, antelopes, zebras, rhinoceroses, and hippopotamuses, and on rhinoceros and antelope horns and hippopotamus tusks. Severe penalties will be enforced against hunters of young elephants and all tusks weighing less than 10 kilogrammes will be confiscated. Reserves will be established, within which it shall be unlawful to hunt, capture, or kill any bird or wild animal except those specially exempted from protection; the reserves to be sufficiently large tracts of lands having abundant food and water and, if possible, salt for preserving birds and wild animals and affording them the necessary quiet during the breeding season. Outside of the reserves close seasons will be established to facilitate the rearing of young, and only holders of licenses, revocable in case of breach of the provisions of the convention, will be permitted to hunt. The use of nets and pitfalls will be restricted, and the use of dynamite or other explosives or of poison for the purpose of taking fish is forbidden. The contracting parties undertook to promulgate the provisions of the convention within a year, and to communicate within eighteen months information as to the areas established as reserves. The prohibitions and restrictions may be relaxed in order to permit the collection of specimens for museums or zoölogical gardens or for scientific purposes, and also where it is desirable for important administrative reasons or necessitated by temporary difficulties of administration. The domestication of zebras, elephants, and ostriches will be encouraged. The convention will remain in force fifteen years, and will continue in force from year to year thereafter, any of the signatory powers having the right to withdraw at the expiration of the period or in any subsequent year by giving twelve months' notice.

The Session of Parliament.—The seventh session of the fourteenth Parliament of the reign of Queen Victoria was opened on Jan. 30, 1900. The royal speech deplored the many valuable lives that had fallen a sacrifice in South Africa without promising able to restore the peace recently broken, it exalted the devotion and enthusiasm with which the people had responded to the appeal to resist the invasion of the South African colonies and the heroism of the soldiers in the field and the co-operating sailors and marines, which had not fallen short of the noblest traditions of British military history, also the patriotic eagerness and spontaneous loyalty with which British subjects everywhere had come forward to share in the common defense of imperial interests, and the brilliant courage and soldierlike qualities of the imperial forces. The Samoan treaty with Germany was mentioned, and the accession of the United States to its stipulations regarding Samoa and Tonga. A bill was promised to sanction the scheme of federation adopted by five of the Australian colonies, the establishment of which great federation would prove advantageous not only to the colonies immediately concerned, but to the Empire at large. Timely measures were said to have been taken to relieve suffering and prevent starvation in the parts of western and central India where, owing to insufficient rainfall in the autumn, the harvests and pasturage had failed to such an extent as to create a famine. The offers of the native rulers of India to send troops to South Africa were spoken of as gratifying proofs of loyalty and of devotion to the cause of the Empire. No prospect of the diminution of the plague in India was foreseen, though its severity was not increased. The provision for military expenditure would be largely increased on account of the great war in South Africa, the lessons derived from which would be important to the military administration, and reliance was placed on the House of Commons not to shrink from the outlay that might be required to place the defensive preparations on a level with the responsibilities entailed by the possession of so great an Empire. At a time when several other nations were perfecting their naval preparations at the cost of increasing sacrifices provision would have been made for the efficiency of the British navy and coast defenses. For domestic reforms involving large expenditure the time was not propitious, the proposals to be made would not be open to this objection. Amendments in the laws governing limited liability companies and in those relating to agricultural tenancies were required. Measures were also proposed for amending the law of ecclesiastical assessments and in regard to education in Scotland and for the relief of tithe rent in Ireland. Attention would be invited to proposals for better enabling local authorities to aid secondary and technical education in England and Wales; for controlling the contracts of money lenders; and for the amendment of the law of lunacy, and of the housing of the working classes act. A bill would be brought in framed with the object of lessening accidents to railway servants in accordance with the recommendations of a commission appointed to inquire into the nature and causes of such accidents. Parliament would be asked to sanction a measure to prevent the injustice of the existing law which appeared to have the effect of disfranchising those serving in South Africa. The bills relating to limited liability companies and money lenders had been before Parliament before. The one had repeatedly passed through the House of Lords, and was now brought

into practical shape by the labors and criticism of lawyers and men of business. The money-lenders bill was rejected in the form in which it was presented in 1899 because the House of Commons would not assent to the tampering with contracts except in cases of proved fraud. The bill for the relief of payers of tithe rent charge in Ireland was a measure long promised to Irish landlords. The measure in aid of secondary and technical education was the financial consequence of the act already passed on the subject. The other measures, none of which were contentious, would only be introduced if there was time to deal with them.

The debate on the address turned mainly on the war. In the vote on Lord Edmond Fitzmaurice's amendment condemning the ministry for its incompetency in preparing for and in the conduct of the war the cleavage of the Opposition was revealed by the abstention of 30 Liberals and also of the Irish Nationalists, who would not vote for it because it did not go far enough. The amendment had the effect of uniting the ministerialists, who rejected it with the crushing majority of 213. Sir Henry Campbell-Bannerman had a divided party to lead, in which Sir Henry Fowler, Sir Edward Grey, and others ranged themselves more and more with Lord Rosebery on the popular imperialist side, while Mr. Morley and Mr. Labouchere remained steadfast in their opposition to the war and Sir William Harcourt took little part in the discussions until he came forward to criticise the supplemental war loan. The reunion of the Irish Nationalist factions was not so complete but that Mr. Healy came into frequent conflict with the majority of his party, in which Mr. Redmond was able to maintain only a slight degree of discipline. The basis of the reunion was the return of the Irish Nationalists to a policy of independent opposition, separating them from their British Liberal allies, who were already eager to renounce Irish home rule as a practical policy. Lord Salisbury and Mr. Balfour, in apologizing for the mistakes and miscalculations of the war, denied that the Government could have known of the Boer preparations, and complained of the scantiness of the secret service fund and of the interference of the treasury in other departments. Lord Lansdowne's exposition of the Government policy of national defense drew criticisms from Unionists and warnings from the Liberal imperialists, represented by Lord Rosebery and Lord Kimberley, as to the inadequacy and temporary character of the military measures. A month's training was first proposed for the volunteers, and this was cut down to fourteen days. The plan of establishing a reserve available for service abroad under certain conditions was condemned as impairing the original character of the volunteer force without making any substantial addition to the fighting strength of the nation. The reduction of the vote for the Colonial Office was moved by Sir Wilfred Lawson as a protest against the ministerial policy in South Africa, which was described as bringing upon the country discredit, degradation, and demoralization. Sir Robert Reid, Mr. Courtney, and Mr. Bryce supported the motion, but only 52 members, of whom 22 were Irish Nationalists, could be mustered against Mr. Chamberlain, who boldly defended his course, and obtained the indorsement of Sir Edward Grey and 39 other Liberals.

The Irish tithe rent charge bill was intended to remedy the grievance of Irish tithe payers who were still paying tithes at the rate fixed in 1872, although English tithes had fallen a third and Irish rents had been cut down twice, while

the terms exacted for exemption were fixed at twenty-two and a half years' purchase when few landowners could obtain fifteen years' purchase for their lands. The bill regulated the tithe rent charge by the average reductions in rent. Payers of church tithes were placed on the same footing as payers of lay tithes. An Irish intermediate education act and a Scotch ecclesiastical assessment act were passed. The secondary education bill was dropped. The act for the prevention of accidents to railway employees empowers the Board of Trade to make rules regulating lighting of stations during shunting after dark, brake vans on trains, protection of men relaying or repairing tracks, or reducing or removing the danger or risk of other operations of railway service, after first giving the company opportunity to act. The company may appeal to the Railway Commissioners to determine whether the rules materially interfere with trade or the necessary operation of the railroad. One effect of this act will be to compel British railroad companies to use automatic coupling. An act relating to merchant shipping extends the liability of shipowners to loss or damage caused to property by improper navigation, although without their actual fault or privity, the liability being limited to £8 a ton. The housing of the working classes act enables local authorities that establish lodging houses for the working classes to establish them outside of their proper jurisdiction, lodging houses including separate houses or cottages, with gardens. If rural district councils fail to adopt the act when they ought to do so the county council may establish lodging houses in the negligent parish, and land acquired anywhere for lodging houses may, with the consent of the county council, or in urban districts with that of the Local Government Board, be let on lease to persons who undertake to build and maintain lodging houses exclusively for occupation by the working classes.

The agricultural holdings act adds to the list of improvements for which a tenant may claim compensation, though they may have been effected without the consent or the knowledge of the landlord. For the consumption of purchased feed by stock and for laying down temporary pasture he may demand compensation, and he can send in his claim up to the last day of his tenancy. If he has acquired fixtures or buildings they become removable at the end of his tenancy to the same extent as if he had put them up himself. The liability for breach of covenant is limited to the actual damage suffered, except in the case of penal covenants against breaking up permanent pasture, burning heaths, and felling trees. The landlord gains the right to enter a farm at any reasonable time for the purpose of ascertaining its condition, and both parties may refer to arbitration any dispute even if not covered by the act. The amount of compensation that can be claimed of a landlord for an improvement is such sum as fairly represents the value of the improvement to an incoming tenant, but nothing due to the inherent qualities of the soil can be claimed as part of the improvement. In the case of buildings and various other improvements the consent of the landlord must be first obtained, in case of drainage notice must be given, but for consumption by stock of grain not produced on the holding, for the application of lime or commercial fertilizers, and for some other kinds of improvements, neither notice nor consent is required. This act applies to Scotch as well as to English holdings. The proposal to bring in the Irish doctrine of compensation for disturbance was rejected by 207 votes against 111.

A workmen's compensation act was passed which

extends the benefit of the act of 1897 to workmen in agriculture, including horticulture, gardening, forestry, and the keeping of live stock. The original act was limited to railroad, factory, and other dangerous employments. The employer is liable to pay compensation to a workman physically injured or to the dependents of a workman killed by accident arising out of and in the course of his employment, provided the accident is such as to disable the workman from earning full wages for at least two weeks and is not attributable to his own serious and willful misconduct, but the compensation must not exceed half his ordinary wages and the compensation for death by accident must not exceed £300.

After the outbreak of trouble in China an act was passed prohibiting the exportation of arms, ammunition, military and naval stores, and any article capable of being converted into or made useful in increasing the quantity of arms, to any country or place named in a royal proclamation whenever it may be deemed expedient for the prevention of their being used against British forces or their allies. On Aug. 7, the day after this act was passed, the exportation of arms and ammunition to China was prohibited by royal proclamation. The electoral disabilities of reservists, militiamen, yeomen, and volunteers resulting from their absence on military service were removed during the continuance of the war in South Africa. The Uganda Railroad bill provided for carrying on a work that has far exceeded already the original estimate.

Besides the Commonwealth of Australia act, Parliament passed more than 60 other acts, half of them of little general interest or applying to Scotland and Ireland. The most important were the companies act, the agricultural holdings act, the workmen's compensation act, and the housing of the working classes act.

The companies act is the outcome of the report of a committee appointed by the Board of Trade in 1894. Hereafter no person can become a director or be named in a prospectus as a director of a company unless he has contracted to pay for the shares necessary for his qualification. No allotment of shares may be made and offered to the public for subscription unless the minimum amount specified in the prospectus or else the whole capital has been subscribed; otherwise subscribers may reclaim their money and recover from the directors. Any brokerage, commissions, or discounts for subscribing or the procurement of subscriptions may be only of such amount or rate as is authorized in the articles of association and disclosed in the prospectus. Every prospectus or notice offering shares, debentures, or debenture stock for public subscription must be dated, signed by all the directors, and registered. No new company will be allowed to commence business or borrow money until a declaration has been filed that the minimum amount of cash subscriptions has been paid in and every director has paid his proportion. A list of subscribers must be filed, and an account given of shares allotted otherwise than for cash. The companies act of 1867 declared a prospectus fraudulent unless it stated every contract. The new act demands in a prospectus the memorandum of association, the qualification for directors, the minimum subscription requisite before allotment, the commissions, preliminary expenses, and payments to promoters, the dates of and parties to every material contract, and full particulars of the interest of every director in the promotion of the company, with a statement of all sums paid in cash or shares by any person for his services or to qualify him as

director. A waiver of rights secured by the act is void, but a director can not be held liable for a defective prospectus if he proves that he was not cognizant of the matters not disclosed. When a new company is started a meeting of the shareholders must be held, after they have already received a report of the number of shares allotted, distinguishing those not allotted for cash, the names of shareholders, the particulars of contracts or modifications of contracts to be voted on, and a statement of receipts and payments. Mortgages given by companies have to be registered, and all mortgage debts must be published in the annual report, also the names and addresses of the directors, and at every annual meeting auditors must be appointed, otherwise on the application of a member. One object of the act is to do away with the spurious qualifications of directors and the gift of paid-up shares. It not only must the minimum amount to be subscribed before allotment be stated in the prospectus, but 75 per cent. of the amount due on application must be paid up *bona fide* before business is begun.

An elementary education act was passed empowering poor law guardians to contribute to school funds so as to provide for the education of pauper children, reckoning average attendance annually, granting school fees, and changing the maximum age of compulsory attendance from thirteen to fourteen years. An amendment to the mining act prohibits the employment below ground of any person under thirteen, instead of the former limit of twelve years.

The money lenders act is practically identical with the measure that failed to pass in the preceding session. Every person whose business is lending money or who advertises or holds himself out as carrying on that business is obliged to register himself as a professional money lender, and is liable to have his contracts judicially varied if the interest of a borrower where the borrower has sued for a loan and there is evidence which satisfies the court that the interest or the charge is excessive and that the transaction is harsh and unconscionable, or is otherwise such that a court of equity would give relief. The act may in such case reopen the transaction to relieve the borrower from the payment of any sum in excess of that adjudged to be reasonable, may order the money lender to repay such excess, may set aside or alter any security or agreement, may if the money lender has parted with the security may order him to indemnify the borrower, and on his side may also initiate proceedings to obtain judicial relief as if he had waited to be sued. The rights of a *bona fide* assignee or holder of value without notice are not to be affected, however. The money lender is required to register his name or his usual trade name, and the address or addresses where he carries on business. Any money lender fraudulently inducing or attempting to induce a person to borrow is guilty of a misdemeanor, and any money lender or other person who sends circulars inviting an infant to borrow is presumed to know that the invitation sent to an infant unless he proves that he has reasonable ground for believing the infant to be of age.

An act for the preservation of ancient monuments empowers county councils to purchase or on the request of the owners become the guardians of any structure or monument of historic or architectural interest which in the opinion of the Commissioners of Public Works is worth preserving to the public by reason of its historic, traditional, or artistic interest. The Commissioners of Public

Works may likewise become guardians of ancient monuments, and may, as well as the county councils, receive voluntary contributions for their maintenance, all such monuments to be freely accessible to the public.

The decennial census, first taken in 1801, was authorized to be taken of all persons abiding in any house in Great Britain or in Ireland on the night of March 31, 1901, overseers of the poor and relieving officers to act as enumerators when required. The census papers are left at every house to be filled up with the name, sex, age, occupation, condition as to marriage, relation to head of the family, and birthplace of every person in the house, whether any such person is defective, the number of rooms occupied if less than five, and in Wales and Monmouthshire the language spoken. The burial acts were amended with the object of doing away with complications, unjust provisions, and causes of dispute. Consecration or partial consecration is made subject to the approval of the Home Office, while undenominational chapels may be erected on unconsecrated burying grounds, and no fees may be exacted except for services rendered. An act was passed making it an offense wantonly to abuse, cause suffering to, infuriate, or terrify wild animals in captivity.

In accordance with the Commonwealth of Australia act a royal proclamation was issued on Sept. 17 declaring the union of the Australian colonies under the constitution they had approved, with the compromise as to appeals to the Privy Council to which Mr. Chamberlain agreed (see AUSTRALASIA). A bill was passed admitting to practice in the United Kingdom colonial solicitors of three years' standing and of good character, either on passing an examination or in certain cases without examination. Another bill empowers trustees to invest in colonial stocks. An eight-hour bill for miners was rejected by 199 votes against 175. The Scotch education bill, the lunacy bill, the factory acts amendment bill, and several minor measures of the Government were withdrawn. A sequel to Mr. Chamberlain's veto of the Australian claim to have all appeals tried by the Supreme Court of the commonwealth was a measure for the appointment of four colonial judges to the Privy Council. The bill had been prepared by the last Colonial Secretary, and was only a temporary expedient, a partial fulfillment of Mr. Chamberlain's pledge, and was not pressed. The ultimate intention is to merge the Judicial Committee of the Privy Council with the appellate jurisdiction of the House of Lords, and thus constitute a High Court of Appeals for the entire empire, in which colonial jurists will be amply represented. Sir Henry Wedderburn and Sir Henry Fowler appealed to the Government and to Parliament to vote a grant in aid to India for famine relief, but unsuccessfully, although Lord George Hamilton admitted that the extent and cost of the famine surpassed all estimates. An Irish proposition to establish a Roman Catholic university in Ireland was repelled by the Government on the plea that it could not be known what would be acceptable to the Roman hierarchy. The Irish landlords put forward a demand for compensation for injury caused by agrarian legislation, and obtained a majority in the upper house, but the ministry, which had just given them relief from the burden of tithes, rejected their abstract claim. An investigation was ordered into the hospital service in Africa in consequence of charges brought by Mr. Burdett-Coutts; also an investigation into the use of Belleville boilers in the navy and one into War Office contracts.

During the session the Duke of Norfolk resigned

as Postmaster-General in order to serve with the troops in South Africa. He was succeeded by Lord Londonderry. Sir Richard Webster became Master of the Rolls, and was succeeded as Attorney-General by Sir Robert Finlay. Sir Edward Carson became Solicitor-General. Parliament was prorogued on Aug. 8. The lament over the inconclusive campaign in Africa was repeated in the speech from the throne, although brilliant skill and the heroism and high military qualities of the troops had succeeded in driving the invaders beyond the frontiers. The Orange Free State had been annexed by proclamation in the belief that the continued political independence of the two republics would be a constant danger to the peace of South Africa, and that it would be the first step toward the union of races under institutions which, while establishing from the outset good and just government for all, may be in time developed so as to secure equal rights and privileges in the South African dominions. The disturbances in China and Ashanti were mentioned, and the famine and plague still raging in India.

The General Election.—The parliamentary elections were held in the week beginning Oct. 14. In the electoral campaign Sir Henry Campbell-Bannerman, the accepted leader of the Liberals, denounced the policy advocated by Sir Alfred Milner in South Africa of governing the Orange River and Transvaal colonies, as the Boer republics were termed when their annexation was proclaimed, as Crown colonies. The Conservatives obtained 332 seats, the same number as in the last Parliament, and the Liberal Unionists increased theirs from 67 to 69, making 401 ministerialists, compared with 399 in the former Parliament, and 269 in the Opposition, compared with 271. Of the Liberals with imperialistic tendencies, however, of whom the outgoing Parliament contained 63, there were 81 in the new house, while the Radicals and Labor members fell off from 126 to 106, the Irish Nationalists retaining their 82 seats. The Cabinet was reconstituted on Nov. 12 as follows: Prime Minister, Lord Salisbury; Lord Chancellor, Lord Halsbury; Lord President of the Council, the Duke of Devonshire; Lord Privy Seal, Lord Cross; Chancellor of the Exchequer, Sir Michael Hicks-Beach; Home Secretary, Mr. Ritchie; Foreign Secretary, Lord Lansdowne; Colonial Secretary, Mr. Chamberlain; Secretary for War, W. St. John Brodrick, previously Parliamentary Secretary for Foreign Affairs; Secretary for India, Lord George Hamilton; Secretary for Scotland, Lord Balfour of Burleigh; First Lord of the Admiralty as successor of Mr. Goschen, Lord Selbourne; First Lord of the Treasury, Mr. Balfour; Lord Lieutenant of Ireland, Lord Cadogan; Lord Chancellor of Ireland, Lord Ashbourne; President of the Board of Trade, Gerald Balfour, previously Chief Secretary for Ireland; President of the Local Government Board, Walter Long, previously President of the Board of Agriculture; Secretary of Works and Public Buildings, Mr. Akers-Douglas; Chief Secretary for Ireland, George Wyndham, previously Parliamentary Secretary for War; Postmaster-General, Lord Londonderry; Vice President of the Council, Sir John Gorst; Attorney-General, Sir Robert Finlay; Solicitor-General, Sir Edward Carson.

Edward VII.—The Prince of Wales took the oath as King in St. James's palace, Jan. 23, under the style chosen by his mother, and on the 24th was proclaimed throughout the kingdom as "Edward VII, by the Grace of God, of the United Kingdom of Great Britain and Ireland, Defender of the Faith, Emperor of India." Parliament was not dissolved on the decease of the sovereign, the law

having been changed a few years before. The first proclamation of the King retained in office all persons in the employment of the Crown.

Albert Edward (now Edward VII) was born Nov. 9, 1841. He was taught in his childhood by Lady Lyttleton, a sister of Mrs. Gladstone, and after he was six years old by the Rev. Henry Mildred Birch for four years, and then Frederick W. Gibbs became his tutor. He legally attained his majority at the age of eighteen, and traveled through Continental Europe incognito as Baron Renfrew, with Mr. Tarver, who thenceforth directed his studies. He entered upon a course of study at Edinburgh so severe that the newspapers made complaint that the heir apparent was being overeducated. Later at Christ College, Oxford, he joined freely in the sports and social life of the undergraduates, and at Trinity College, Cambridge, he led a life of ease and pleasure. In 1860 he visited Canada, accompanied by the Duke of Newcastle, in recognition of the services of the Canadian regiment in the Crimean War. Before returning to England he made a journey through the United States as Baron Renfrew. He fell in love with Princess Alexandra of Schleswig-Holstein, daughter of the heir designate of the Danish throne, when he first met her in the autumn of 1861, and on March 10, 1863, they were married. With his wife he made many journeys in Europe. In 1875 he visited India. The expense of this official tour was a subject of complaint, but the popular mood changed when its political effect in India was appreciated, and he was welcomed home with ceremonies eclipsing those of the thanksgiving over his recovery from typhoid fever four years before. He made himself very popular by presiding at public feasts and ceremonies and by his modest and tactful addresses on such occasions. When he consented to officiate at a festival of the licensed victuallers in 1876, the temperance societies raised a protest; and Radicals complained constantly about the sums allowed him by Parliament and about his extravagance and readiness to make debts. They thought the debts ought to be paid by his mother, who was accused of niggardliness. The seclusion of the Queen and her abstention from the public duties of royalty made it necessary for the prince to take her place whenever law and etiquette would allow. In social life he surrounded himself with a jovial and pleasure-loving set, some of them such as his mother would scarcely admit to court. Following his father's example, he took a keen interest in promoting exhibitions, notably the Colonial and Indian Exhibition of 1886. His first speech in the House of Lords was one in 1884 supporting a measure to secure the better housing of the poor, and the interest that he showed led to his being appointed a commissioner to study the question. The British public was once scandalized when the Prince of Wales was summoned as a witness in a divorce suit, and years later when through his testimony an officer was cashiered for cheating at cards. As a sportsman, however, a good shot, a daring fox hunter, an owner of race horses since 1877, who won the Derby with Persimmon in 1896 and with Diamond Jubilee in 1900, a yachtsman, commodore of the Royal Yacht Squadron since 1882, and winner of the Queen's cup with the cutter Britannia, and as a patron of the stage, the Prince of Wales pleased the great majority of the English people, and also by his popular tastes and democratic ways, such as riding in cabs and mingling with the common run of pleasure seekers. The practical interest that he took in agriculture, evinced in the development and management of his model estate at Sandringham, where he bred prize

tle, horses, and dogs, won the approval of the pious-minded, and still more the fidelity with which the prince discharged his dull and trying public duties, his interest in charities and beneficial enterprises, the businesslike system that enabled him to go through the schedule of his public appearances and to carry on his extensive correspondence, his more sober and earnest life during the past ten years, and the lively interest that he took in the public affairs and international relations of England, coupled with a conscientious and judicious avoidance of all interference, or even the slightest exertion of personal influence or betrayal of his private predilections or prejudices in political matters. He learned German as well as English while a boy, and to converse also in French, Italian, and Russian.

His eldest child, Prince Albert Victor Christian Edward, Duke of Clarence, born at Frogmore on Jan. 8, 1864, died at Sandringham on Jan. 14, 1900. Prince George, Duke of York, succeeds through his father's accession to the throne to the title of Duke of Cornwall; that of Prince of Wales is conferred on him by Parliament. The younger children are Princess Louise Victoria Alexandra Dagmar, born at Marlborough House on Jan. 20, 1867, and married to the Duke of Fife on May 27, 1889; Princess Victoria Alexandra Olga Mary, born July 6, 1868; Princess Maud Charlotte Victoria, born Nov. 26, 1869, and married on May 22, 1896, to Prince Charles of Denmark. Prince Alexander, a son born April 6, 1871, died the next day.

GREECE, a monarchy in southeastern Europe. The legislative authority is vested in a single chamber called the Boule, composed of 207 members elected for four years by universal adult male suffrage. The reigning King is Georgios I, born Jan. 24, 1845, second son of King Christian of Denmark, elected King of the Hellenes on March 30, 1888, after the deposition of King Otto, with the assent of the protecting powers England, France, and Russia, under whose auspices the Hellenic kingdom was originally established in 1830 after the overthrow of Turkish rule. The apparent heir is Prince Konstantinos, Duke of Sparta, born Aug. 2, 1868. The Cabinet, formed April 14, 1899, was composed as follows: President of the Council and Minister of the Interior, M. Deligiannis; Minister of Finance, M. Simopoulos; Minister of Foreign Affairs, M. Romanos; Minister of Worship and Instruction, M. Eutaxias; Minister of War, Col. Koumoundouros; Minister of Marine, Capt. Bourdouris; Minister of Justice, M. Karapoulos.

Area and Population.—The area of the Hellenic kingdom is 25,014 square miles. The population in 1896 was 2,433,806, being 97.3 per square mile. Athens, the capital, had 111,486 inhabitants. There are about 100,000 Albanians in Greece who have preserved their distinct nationality, while in the Turkish Empire there are over 6,000,000 persons who are Greek in language and religion, and the Greek strain is apparent in a considerable portion of the Mohammedan population in Asia Minor especially and on the islands.

Finances.—The revenue for 1899 was estimated at 207,085,658 drachmai, of which direct taxes produced 20,077,800 drachmai; duties and excise, 38,000,000 drachmai; stamps and fees, 19,209,900 drachmai; monopolies, 11,940,500 drachmai; state property, 4,217,065 drachmai; sales of state property, 832,400 drachmai; deductions, etc., 4,560 drachmai; various receipts, 7,969,258 drachmai; international telegraphs, 472,000 drachmai; lighthouses, 400,000 drachmai; instruction, 100,000 drachmai; police contributions of com-

munes, 442,000 drachmai; extraordinary receipts, 1,473,175 drachmai. The expenditure was estimated at 103,418,273 drachmai, of which the public debt consumed 29,014,277 drachmai; allowances, 116,300 drachmai; various obligations, 200,000 drachmai; pensions, 6,093,603 drachmai; the civil list, 1,325,000 drachmai; the Chamber of Deputies, 919,220 drachmai; the Ministry of Foreign Affairs, 2,198,373 drachmai; the Ministry of Justice, 5,758,200 drachmai; the Ministry of the Interior, 13,077,505 drachmai; the Ministry of Worship, 5,431,630 drachmai; the Ministry of War, 18,008,340 drachmai; the Ministry of Marine, 7,608,739 drachmai; the Ministry of Finance, 2,018,688 drachmai; collection of taxes, 9,041,858 drachmai; various expenditures, 2,606,630 drachmai. For 1900 the revised estimate of revenue was 111,315,528 drachmai, and of expenditure 110,240,731 drachmai. For 1901 the estimate is 114,000,000 drachmai of revenue and 111,000,000 drachmai of expenditure.

The public debt, payable in gold, on Jan. 1, 1900, amounted to 699,617,000 drachmai in gold, requiring an annual expenditure for interest and amortization of 14,657,535 drachmai. There was, moreover, a paper debt of 173,690,760 drachmai, requiring 5,083,500 drachmai a year.

The International Committee of Control during the year ending Jan. 12, 1900, received 10,685,108 drachmai in gold and 55,174,450 drachmai in paper, and expended 9,981,103 drachmai in gold and 50,212,090 drachmai in paper.

The revenues appropriated for the service of the public debt yielded 3,533,755 drachmai over the estimate, of which 60 per cent., after deducting 18 per cent. for the expense of control, was available, as also the profit on the rate of exchange, for the service of the debt, one half to increase the interest and one half to augment the amortization. The amount of this surplus was 1,712,078 drachmai, allowing an increase of 2 per cent. on the interest of one class of bonds and 4 per cent. on others. The revenues assigned to the commission are those from the salt, petroleum, emery, and other monopolies, the tobacco duty, the stamp duty, and the import dues of the port of Piræus. The customs revenue in 1898 amounted to 34,437,374 drachmai, salt revenue to 2,467,926 drachmai, petroleum revenue to 5,115,165 drachmai. The administration of the monopolies is intrusted to a company. Smuggling of petroleum and salt and frauds in the collection of the tobacco, customs, and stamp duties deprive the commission of a part of the assigned revenues. The rates of interest paid in 1899 were 47 per cent. of the original interest on the monopoly loan and 40 per cent. of that of the funding loan and the other loans. Germany, Austria, France, Great Britain, Italy, and Russia, the mediating powers between Greece and Turkey, have representatives in the commission. Of the new loan of 170,000,000 drachmai guaranteed by the powers, 93,930,000 drachmai were paid to Turkey as a war indemnity, 31,350,000 drachmai were applied to paying off the floating gold debts, 2,440,000 drachmai were used to settle other debts, 21,960,000 drachmai were given to the Government to cover the deficit of 1897, and 20,000,000 drachmai were available to meet the deficits of other years.

The Army and Navy.—Every Hellenic is liable to serve in the army for two years from the age of twenty-one. Whoever is not drawn for active service is inscribed in the reserve and pays a tax. The army in 1898 numbered 1,880 officers and 23,453 noncommissioned officers and privates; total, 25,333 men, with 3,294 horses and 180 guns. The war strength is about 82,000 of all ranks.

The navy consists of 5 armor clads, 17 large torpedo boats, 1 torpedo ship, 2 corvettes, 2 unarmored cruisers, and 12 gunboats. The newest and best vessels are the French-built belted cruisers Hydra, Spetsai, and Psara, having a displacement of 4,885 tons, 11.8 inches of armor at the water line, and 3 10.6-inch and 4 5.9-inch Canet guns, 7 6-pounder quick firers, and 16 smaller guns.

Navigation.—The number of vessels entered at Greek ports during 1898 was 6,428, of 3,289,298 tons; cleared, 5,979, of 3,205,892 tons. The Greek vessels among the total numbered 2,933 entered and 2,712 cleared. The merchant shipping of Greece on Jan. 1, 1898, consisted of 1,152 sailing vessels, of 238,196 tons, and 118 steamers, of 87,845 tons.

Commerce and Production.—The most important product of Greece is the dried currant, of which an average crop of 350,000,000 pounds is gathered. The production having outgrown the demand, a law was passed in 1895 and renewed every year since, by which 15 per cent. of the crop is retained by the Government and sold to distillers, the proceeds furnishing capital for an agricultural bank for the benefit of currant growers. The crop of 1898 was 160,000 tons, of which 24,000 tons were retained, leaving 136,000 tons for export, which was still in excess of the world's requirements, the quantity exported having been 102,078 tons. In 1899 the crop was fair, but in 1900 disease caused a serious failure in Peloponnesus and the Ionian Islands, causing distress among the farmers, though not impairing the revenue because the price rose to double what it had been.

The land in Greece is cultivated by the owners. It is exceedingly fertile, producing wheat, barley, corn, and other grains, tobacco, olives, and fruits. Capital is scarce and agricultural methods are backward. The annual yield of cereals is over 20,000,000 bushels; of tobacco, 16,500,000 pounds. There are 2,025,400 acres of forest. The yield of valonia in 1898 was 5,200 tons. In Messenia, the seat of the silk culture, 150,000 kilogrammes of cocoons and 8,000 kilogrammes of silk were produced in 1897. There are 843 tons of powder and 112 tons of dynamite manufactured annually, and the product of soap factories is 8,240 tons. Olives and wine are important products. There are about 100,000 horses, 360,000 cattle, and 2,900,000 sheep, the pasturage amounting to 5,000,000 acres. The mineral products in 1898 were 262,782 tons of manganese ore, 169,443 tons of hematite, 24,024 tons of zinc ore, 2,536 tons of dressed galena, 1,255 tons of dress lead and zinc blend, 2,800 tons of lead smokes, and 300,724 tons of low-grade lead ore, yielding 18,820 tons of pig lead with silver. The total value of special imports in 1898 was 152,083,634 drachmai in gold; domestic exports, 80,734,074 drachmai. The chief imports were cereals for 37,116,931 gold drachmai, textiles for 31,622,983 drachmai, coal and raw materials for 16,250,034 drachmai, fish and caviar for 6,849,034 drachmai, timber for 7,709,726 drachmai, live animals for 5,061,430 drachmai, chemicals for 5,385,800 drachmai, ores and metals for 6,327,004 drachmai, sugar for 3,629,171 drachmai, hides for 3,448,255 drachmai, and coffee for 2,765,547 drachmai. The export of currants was valued at 37,791,773 drachmai in gold; ores, 20,960,786 drachmai; wine, 4,530,809 drachmai; olive oil, 3,658,824 drachmai; figs, 2,961,600 drachmai; tobacco, 1,964,196 drachmai; gall nuts, 1,896,631 drachmai; silk and cocoons, 1,248,053 drachmai; brandy, 1,165,533 drachmai; sponges, 1,083,500 drachmai; gunpowder, 820,850 drachmai; olives, 704,317 drachmai; emery, 536,227 drachmai. The quantity of tobacco cut in the Government factories in 1898 was

3,188,088 pounds, besides 126,896 pounds of tumbeki, and the duties collected were 6,873,022 drachmai. The values in gold drachmai of the special imports from and domestic imports to different countries in 1897 are given in the following table:

COUNTRIES.	Imports.	Exports.
Great Britain	29,486,910	26,763,302
Russia	29,256,722	2,434,927
Austria-Hungary	11,583,856	8,065,969
France	11,686,888	7,641,507
Turkey and Egypt	9,628,061	7,016,371
Germany	7,550,468	4,733,690
Belgium	2,951,694	7,616,747
Italy	2,778,343	5,233,428
United States	3,890,662	3,644,246
Netherlands	761,598	6,459,878
All other countries	6,768,121	2,078,621
Total	116,363,348	81,708,626

Railroads, Posts, and Telegraphs.—The railroads of Greece had a total length of 591 miles, and 300 miles were building, principally the extension of the railroad terminating at Athens to the Turkish port of Larissa, there connecting with the railroad running north to the trunk line through Servia, Bulgaria, and Turkey. The extension of the line from Piræus to Larissa as far as Demerli near the Thessalian frontier was intrusted to a syndicate in March, 1900, the Government issuing a 4-per-cent. loan of 43,750,000 drachmai for the purpose and the company raising 10,000,000 drachmai of capital entitled to a profit of 6 per cent. under international control.

The telegraph lines had a total length of 500 miles on Jan. 1, 1899, with 6,090 miles of wire. The number of internal telegrams in 1898 was 902,872; international, 97,939; official, 19,320. The receipts were 1,981,681 drachmai.

The postal business in 1898 was 5,233,000 letters and post cards and 5,860,000 papers and samples carried in the internal and 5,362,000 letters and post cards and 3,525,000 papers and samples in the international service; receipts, 1,792,000 drachmai; expenses, 1,895,543 drachmai.

Politics and Legislation.—On Jan. 10, 1900, Col. Koumoudouros resigned his portfolio as Minister of War, having made an error in his estimates and being prevented from carrying through the reorganization of the army. Col. Tsamados was appointed to the post, which he had filled under Trikupis and Rallis. An army bill was passed in March which practically transfers the administration of the army from the Minister of War to the Crown Prince and intrusts the reorganization of the army to foreign officers. Some of the junior officers of the infantry in the summer incurred punishment by making a demonstration against the exclusion of their arm from staff appointments.

GUAM, the largest of the Ladrones or Marianne Islands, ceded to the United States by Spain in the treaty of Dec. 11, 1898, the other islands of the archipelago being subsequently transferred to Germany. Guam has an area of nearly 200 square miles and about 9,000 inhabitants, who are the descendants of immigrants from the Philippine Islands, the original population having died out. About two thirds of the people live in Agaña, the chief town. Spanish and the native Chimorro are the languages of ordinary intercourse, but many of the inhabitants understand English. There are 18 schools, and 90 per cent. of the natives can read and write. The island is fertile and to a great extent covered with woods containing valuable timber. The first American Governor was Capt. Leary, who was residing in Samoa at the time when Guam was occupied by American troops

July, 1898. He sold to collectors the first stage stamps that were printed in Washington use on the island and other lots afterward, making out the scanty revenue. He ordered the people of Agana who were living in irregular blocks to have their unions legalized, and commanded them to conform their dress and customs to civilized usages. On Washington's Birthday issued a proclamation declaring that personal liberty was the inalienable right of all men, and that the mild form of slavery hitherto practiced on the islands was at an end wherever the United States had jurisdiction. A breakwater for the dead-end has been designed, and the fortification of the harbor of San Luis d'Apra is contemplated in order to fit it for a coaling station on the route between Honolulu and Manila. A store of coal has already been accumulated, and transports and ships for Manila are usually compelled to take coal there.

GUATEMALA, a republic in Central America. Legislative power is vested in the National Assembly, a single chamber of 69 members, 1 to 100 inhabitants, elected for four years by universal adult male suffrage, and in the Council of State, consisting of 13 members, part elected by the Assembly and part appointed by the President. Executive power is vested in the President, who is under the Constitution elected by the people for six years and can not be a candidate for the next succeeding term. Manuel Estrada Cabrera was proclaimed President by the National Assembly on Sept. 25, 1898, for the term ending March 15, 1905. The Cabinet in the beginning of 1900 consisted of the following members: Secretary of the Interior, Justice, and Foreign Affairs, Francisco Anguiano; Secretary of War, Gen. Gregorio Contreras; Secretary of Fomento, Rafael Ponciano; Secretary of Public Instruction, Domingo Morales; Secretary of Finance, Pedro Perez Portocarrero.

Area and Population.—Guatemala has an estimated area of 63,400 square miles. The population in 1898 was 1,535,632. There is a small portion of pure Spanish blood, but nearly all are not Indians are of mixed blood, and the fifths of the inhabitants are Indians. There are about 12,000 foreigners. Most of the foreigners are native whites live in Guatemala la Nueva, capital, which has about 73,000 inhabitants.

Finances.—The revenue in 1897 was \$12,479, and expenditure \$21,433,194. In 1898 the revenue was \$9,738,061, and expenditure \$9,964,833. In 1899 the revenue was estimated at \$9,815,000, which \$4,402,000 come from customs, \$1,587,000 from taxation, and \$3,546,000 from monopolies. Expenditure was estimated at \$13,708,781, of which \$6,211,901 were assigned to the Department of Finance, \$1,349,588 to the interior and justice, \$9,997 to education, \$2,254,762 to the War Department, and \$1,725,380 to agriculture and public works. The revenue is collected in currency. There is very little metallic money in the country, the premium on silver coin rose in 1899 to 10 per cent., and on gold to 430 per cent. The foreign gold loan of 1895 amounted in 1899,

with £29,656 arrears of interest, to £1,512,456. The silver debt, including outstanding cedulas, railroad loans, and floating obligations, amounted on Jan. 1, 1899, to \$18,638,281 in silver, and gold debts separate from the loan of 1895 to \$1,203,205 in gold. The banks by a decree issued on Oct. 29, 1898, were authorized to issue \$6,000,000 in notes that are legal tender to the exclusion of former issues of notes and in preference to silver, even though debts are made payable in silver by the contract.

Commerce and Production.—The coffee crop in 1898 was 826,033 quintals. There is an export duty on coffee of \$1 silver per quintal. The quantity of tobacco grown on 2,500 acres is 9,900 quintals a year; of sugar on 66,700 acres, 25,000 quintals. Bananas are cultivated for food and export, and corn is grown. Cacao is planted for the foreign market. The planting of rubber trees is encouraged by the Government, which in a decree issued on Jan. 14, 1899, offers a caballeria of the national land for every 20,000 plants grown, to be given when they are four years old. Cattle are pastured on the high table-land, about 500,000 head in 1895. The number of horses is estimated at 62,000; of mules, 42,000. The national lands, by the law of 1894, excepting on the seashore and the land frontiers, are open to settlers in lots of 15 caballerias or less at prices ranging from \$250 to \$500 per caballeria of 112½ acres. Wild lands may be granted without price to immigrants or colonization companies or to municipalities or villages, or in consideration of road making or for school funds. Gold, silver, and salt are mined to a small extent, and lead, tin, and copper are found. The value of imports in 1898 was \$4,850,835 in gold, equivalent to \$13,207,656 in silver; exports, \$15,377,460 in silver. The gold value of cotton imports was \$588,608; flour, \$422,833; liquors, \$261,838; preserved foods, \$117,126; iron wares, \$169,888; silk goods, \$106,808; gold and silver coin, \$439,704. The value in silver of the coffee exported was \$14,062,598; bananas, \$93,246; hides, \$55,891. Of the imports, \$1,549,146 came from the United States, \$937,839 from Germany, \$648,445 from Great Britain, and \$217,337 from France. Of the coffee exported, 498,270 quintals went to Germany, 180,000 to Great Britain, and 128,473 to the United States. The number of vessels entered at Guatemalan ports in 1898 was 825, and 845 were cleared, nearly all United States vessels.

Railroads, Posts, and Telegraphs.—The railroad from Champerico to Retalhuleu, 32 miles, was extended to San Felipe. New lines between Port Barrios and Iztapa and the capital have recently been undertaken, and the line from the port of Iztapa has been completed, the Government paying a subsidy of £1,630 a mile. An American company had 130 miles of the other line (210 miles in total length) in operation in 1898, receiving a subsidy of \$40,000 a month.

The number of letters, cards, papers, parcels, etc., dispatched through the post office during 1898 was 2,769,543; received, 2,771,035. There are 3,126 miles of telegraphs. The number of messages sent during 1898 was 653,462.

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HAWAII, a Territory of the United States, formerly an independent kingdom. Queen Liliuokalani, the last sovereign, having proclaimed her rights in the Constitution favorable to the native Kanaka population which threatened the ascendancy of the whites, was forced to abdicate.

by a revolution in which the United States naval forces intervened by a demonstration that was construed as menacing. Liliuokalani declared that she yielded to superior force, and afterward appealed to the President of the United States to restore her throne. The revolutionary party, most

of whose leaders were descendants of American missionaries, proclaimed in January, 1893, a provisional government to carry on affairs pending annexation to the United States. On July 4, 1894, a republic was constituted in which native Hawaiians and white residents who could read and write either Hawaiian or English had the right to vote indirectly for Senators and members of the House of Representatives. On Aug. 12, 1898, in accordance with a joint resolution of Congress, the Hawaiian Islands were formally annexed to the United States, an annexation treaty having, on June 16, 1897, been signed at Washington by envoys of the Hawaiian Republic and John Sherman, Secretary of State, in which it was stipulated that, until Congress should provide for the government of the islands, the civil, judicial, and military powers were to be vested in such persons and exercised in such manner as the President of the United States should direct, and the power was conferred on him to remove officers and fill vacancies. The United States assumed lawful debts of the Hawaiian Government not to exceed \$4,000,000. The existing Government of Hawaii was confirmed, and its members continued in office for such period as existing customs relations of Hawaii with the United States and other countries remain unchanged. Until otherwise determined by Congress the municipal laws of the republic were continued in force so far as they were not inconsistent with the treaties or the Constitution of the United States, but all treaties of the Hawaiian Government forthwith ceased and determined. Chinese were henceforth to be excluded from Hawaii in accordance with the law of Congress prohibiting their ingress into American territory, and the Chinese already in Hawaii were barred from immigrating into the United States. In accordance with the recommendations of a commission appointed to recommend legislation for the Hawaiian Islands all whites, including Portuguese, all persons of African descent, and all descendants of the Hawaiian race, either on the paternal or maternal side, who were citizens of the Hawaiian Republic were declared citizens of the United States. There were 2,687 electors on the register in 1897. President Sanford B. Dole and all the administrative and judicial officers were continued in their functions. For military purposes the islands were attached to the department of California. The Cabinet was composed in the beginning of 1900 of the following members: Minister of Foreign Affairs and of Public Instruction, E. A. Mott-Smith; Minister of the Interior, J. A. King; Minister of Finance, S. M. Damon; Attorney-General, H. E. Cooper.

Area and Population.—The area and population of the different islands on Sept. 27, 1896, were as follow:

ISLANDS.	Square miles.	Population.
Oahu	600	40,205
Hawaii	4,210	83,385
Mau	760	17,736
Kauai and Niihau	687	15,392
Molokai and Lanai	420	2,412
Kahulawe	63	.....
Total	6,740	109,030

The total population was composed of 72,517 males and 36,503 females. There were 31,019 native Hawaiians, 8,485 Hawaiians of mixed blood, 24,407 Japanese, 21,616 Chinese, 15,191 Portuguese, 3,086 Americans, 2,250 English, 1,534 Germans, and 1,420 of various other nationalities. The religion of 26,363 was Roman Catholic; of 23,773 Protestant; of 4,886 Mormon; of 44,306 Buddhist,

Confucian, Shinto, etc.; of 10,192 unknown. The immigration in 1894 was 8,114, and emigration 5,477; immigration in 1895 was 8,090, and emigration 4,636; immigration in 1896 was 13,984, and emigration 6,857; immigration in 1897 was 11,379, and emigration 6,504; immigration in 1898 was 17,229, and emigration 7,313. Most of the later immigrants are Japanese, brought under contract to labor. The total population was estimated in 1898 at 117,281. The native Hawaiians are rapidly declining in numbers, owing to excessive infant mortality. On June 1, 1900, the population of the islands was 154,001, showing an increase of 41.2 per cent. in four years. This increase was due to the influx of newcomers and the growth of the alien and mixed population. The number of pure Hawaiians in 1853 was 71,019. The smallpox, measles, and other contagious diseases which formerly decimated them because they are peculiarly susceptible to infectious disorders are now held in check, and so is leprosy, to which a great many fell a prey in later times. One cause of the declining number of pure Hawaiians is their frequent intermarriage with Americans, Portuguese, Japanese, Chinese, and other foreigners. Oahu in 1900 had 58,504 inhabitants, two fifths of them living in Honolulu. Hawaii had 46,843, the large expansion of the sugar industry having drawn immigrants to that island in numbers sufficient to increase its population 75 per cent. since 1890. The population of Maui, where nearly all the tillable land has been brought under cultivation and production, has been enormously increased by irrigation, was 25,416, showing a growth of 30 per cent. in four years. Kauai, where there are rich sugar and rice plantations and good pasture lands, with a very small native population, had 20,562 inhabitants. Molokai, on whose north shore two leper settlements are situated, and the neighboring little island of Lanai showed the smallest increase in population, having together 2,504. Niihau, which is practically owned by one white man, had only 172 inhabitants on an area of 97 square miles. The percentage of increase in the entire group was 71.1 per cent. in ten years. The population of Honolulu was 39,306, having nearly doubled in the decade and grown into a modern seaport with street cars, electric lighting, and good architecture from a native village of 3,000 souls since the first coming of the missionaries in 1810.

Finances.—The revenue in 1898 was \$2,568,489 and expenditure \$2,186,278. The chief items of revenue were \$896,975 from customs, \$811,818 from taxes, and \$1,585,057 from internal revenue duties. The chief expenditures were \$102,659 for the public debt, \$229,115 for education, \$54,534 for the army, \$239,157 for public works, \$194,966 for sanitation, and \$241,031 for the Attorney-General's office. The debt on Jan. 1, 1899, amounted to \$4,457,605, paying from 5 to 12 per cent. interest.

Commerce and Production.—Sugar is the principal product, and next in importance comes rice. Coffee has been planted extensively, and bananas are largely grown. Hides and skins and wool are exported in considerable quantities. The soil, composed of volcanic detritus and alluvium, is exceedingly fertile. The growth of the sugar industry has been the chief factor in promoting the extraordinary increase in the population and wealth of the Hawaiian Islands, which are now the third largest producer of cane sugar in the world. Nearly all the money invested in agriculture has been put into sugar plantations. The production of raw sugar in 1899 was 282,807 tons, having nearly doubled in five years. There were 51 plantations, employing about 40,500 laborers, of whom 30,000 were Japanese, 6,000 Chinese, 2,150

Portuguese, and the remainder of various nationalities. Scandinavians have been tried, also Poles and Austrians, and in 1900 Porto Ricans and American negroes were taken out.

The total value of imports increased from \$5,730,000 in 1894 and \$5,714,000 in 1895 to \$7,165,000 in 1896, \$8,838,000 in 1897, and \$11,650,000 in 1898; that of exports of Hawaiian produce from \$9,141,000 in 1894 and \$8,358,000 in 1895 to \$15,436,000 in 1896, \$16,022,000 in 1897, and \$17,346,000 in 1898. Foodstuffs for the population, as well as textiles and clothing, timber, machinery, and hardware, are imported. Cereals and provisions, cotton goods, and a majority of other goods are brought from the

necting Oahu with Hawaii, have 250 miles of line. Honolulu already had a thorough telephone system before the fall of the monarchy. The number of letters and other mail matter handled by the post office in 1897 was 5,079,872. The postal savings bank in 1897 had \$953,981 belonging to 10,620 depositors. Cables will soon connect all the islands.

Politics and Legislation.—The tariff and navigation laws of the United States have been extended to the Hawaiian archipelago. The time labor contracts by which laborers engaged to work on the sugar plantations could be restrained by the public force from leaving before the stipulated



HONOLULU.

United States, which supplies 74.64 per cent. of the total imports, while 11.05 per cent. come from England. On many articles imported free from the United States 10 per cent. duty is paid if they come from other countries. Of the exports 99.44 per cent. go to the United States. The imports into the United States from Hawaii were valued at \$17,187,380 in 1898 and \$17,831,463 in 1899, the exports from the United States to Hawaii at \$5,907,155 in 1898 and \$9,305,470 in 1899. The total trade of the islands in 1899 showed an increase of 44 per cent. over that of the previous year. The proportion of the United States in the import trade was 78.8 per cent., that of the British Empire 11.25 per cent. There was a notable increase in the importation of machinery, fertilizers, building materials, clothing, and provisions. Sugar amounted to 97 per cent. of the total exports, all going to the United States. The export of rice has declined, owing to the increased domestic demand. Bee culture is growing into an important industry, especially in Oahu, and the export of honey to Australia and New Zealand has reached a considerable figure. The imports from the Hawaiian Islands into the United States in 1900 reached \$20,707,903 and exports from the United States to the Hawaiian Islands \$13,509,148.

Navigation.—The shipping belonging to Hawaii consisted in 1898 of 71 vessels, of 33,576 tons. Lines of steamers run between Honolulu and American, Australasian, Chinese, and Japanese ports.

Railroads, Posts, and Telegraphs.—On the islands of Oahu, Hawaii, and Maui are railroads having a total length of about 100 miles. The telegraphs in these three islands, with the cable con-

necting Oahu with Hawaii, have 250 miles of line. Honolulu already had a thorough telephone system before the fall of the monarchy. The number of letters and other mail matter handled by the post office in 1897 was 5,079,872. The postal savings bank in 1897 had \$953,981 belonging to 10,620 depositors. Cables will soon connect all the islands.

The first election held in Hawaii since it became a Territorial part of the United States took place in November, 1900. A Delegate to Congress was chosen. There were three parties—Republicans, Democrats, and Independents, the last representing specially the native Hawaiians and the principle of home rule. Samuel Parker, of native descent, the chief cattle breeder of the islands, was the Republican candidate; Prince David Kaunaukoa, a nephew of ex-Queen Liliuokalani, was the candidate of the Democrats; and Robert W. Wilcox, who was a leader in the revolutionary uprising of the natives against the Americanizing Government in power in 1889, was the nominee of the Independents, whose object is to gain the rights of statehood for Hawaii. Mr. Wilcox was the successful candidate, and in the Legislature elected at the same time, comprising 15 Senators and 30 Representatives, the Independents obtained a majority of the seats.

HAYTI, a republic in the West Indies, occupying the western third of the island of Hayti. The legislative power is vested in the National Assembly, consisting of a Senate of 39 members, chosen for six years by the lower house from two lists, one submitted by the President and one by an

electoral college, and a House of Representatives, 95 in number, elected for three years by the votes of all adult male citizens who have regular means of livelihood. The President is elected for seven years by the people. Gen. Tiresias Augustin Sam was elected on April 1, 1896, to fill the unexpired term of President Hippolyte, ending in May, 1902. The Cabinet at the beginning of 1900 was composed as follows: Secretary of Foreign Affairs, Brutus San Victor; Secretary of Finance and Commerce, Herard Roy; Secretary of the Interior and Police, Tancrede Auguste; Secretary of Agriculture and Public Works, C. Leconte; Secretary of Justice and Worship, L. Cauvin; Secretary of War and Marine, V. Guillaume; Secretary of Public Instruction, M. Chanzy.

Area and Population.—The area of the republic is estimated at 10,204 square miles. An ecclesiastical census taken in 1894 made the population 1,210,625. Nine tenths of the people are negroes and the rest of mixed blood. The state religion is the Roman Catholic, but all creeds are tolerated. The people speak the French language, corrupted in the country districts into a patois known as Creole French. Elementary education is free, and nearly \$1,000,000 are spent to support 400 public schools and 5 lyceums; yet the mass of the people, especially in the country, lack the rudiments of education and are extremely ignorant and superstitious, relapsing at times into the savage rites of African witchcraft.

Finances.—Nearly the whole of the public revenue is derived from customs duties, levied in United States gold coin on exports and on imports in gourdes or national dollars, which are 15 per cent. or more below the par of the American dollar. The export duties collected in 1897 amounted to \$2,993,338 in gold, the import duties to \$3,957,857 in currency; the export duties in 1898 to \$3,212,239 in gold, the import duties to \$2,640,574 in currency. For the year ending Sept. 30, 1899, the revenue was estimated at \$5,626,260 in currency and \$2,337,205 in gold; the expenditure at \$5,633,068 in currency and \$2,325,284 in gold.

The public debt on Dec. 31, 1898, consisted of 5 and 6 per cent. foreign gold loans amounting to \$13,141,751, \$4,407,055 of internal debt payable in gold and secured by the export duty on coffee, and \$9,227,713 payable in currency. There were \$3,749,000 of paper money and \$3,500,000 of silver gourdes having the same contents as the French 5-franc piece in circulation in 1899, with \$225,000 in copper. The amount of American gold in the country was about \$1,200,000. A loan of \$3,500,000 in United States gold was authorized in February, 1898, for the purpose of retiring the paper money. The money could not be borrowed, and subsequently a law was passed imposing a supplementary duty on imports, equal to 25 per cent. of the former duties, which was to be applied to the redemption of the paper currency until a loan could be raised.

The Army and Navy.—A Government guard of 650 men with 10 generals among its officers is kept to protect the President. An army of 6,828 men, mostly infantry, has been authorized since 1878. A fleet of small cruisers and gunboats has been acquired at different times.

Commerce and Production.—The staple product of Hayti is coffee, for which the country is admirably adapted. An export duty of \$3.87 a hundredweight is a serious impediment to the extension of the industry, and much of the coffee is gathered from old, neglected plantations. Cacao has been planted in recent times. Cotton also is now planted, and the export is becoming important. Tobacco cultivation has been undertaken

by a company organized lately. The sugar cane is grown mainly for rum, which is distilled and consumed in the country. Copper, iron, and nickel exist, but there is no mining. The chief forest product is logwood. The export of coffee in the year ending Sept. 30, 1898, was 67,437,593 pounds; of cacao, 4,037,129 pounds; of cotton, 1,276,946 pounds; of logwood, 66,603,168 pounds. Minor exports are hides and skins, honey, and mahogany.

There were 196 vessels, of 268,196 tons, entered and cleared at Port-au-Prince in 1898; 192, of 286,577 tons, at Cape Haytien; 134, of 164,644 tons, at Les Cayes; and 177, of 426,552 tons, at Jacmel.

HENDERSON, DAVID BREMNER, Speaker of the United States House of Representatives, was born in Old Deer, Aberdeenshire, Scotland, March 14, 1840. He is a son of Thomas and Barbara Henderson and a grandson of Walter Henderson on his father's side. He was taken to the United States by his parents, who settled on a



DAVID BREMNER HENDERSON.

farm in Winnebago County, Illinois, in 1846. In 1849 they removed to Fayette County, Iowa, where the son was educated, attending district schools and Upper Iowa University at Fayette. He enlisted in the National army, Sept. 15, 1861, and was mustered into service Nov. 5 as first lieutenant of Company C, Twelfth Iowa Infantry. He participated in the battles of Fort Henry, Fort Donelson, Shiloh, and Corinth, was severely wounded at Fort Donelson, and lost a leg at Corinth, Oct. 4, 1862. He re-entered the army, June 10, 1864, as colonel of the Forty-sixth Iowa Infantry, and served until the close of the war. He was admitted to the bar at Dubuque in 1865, and was appointed collector of internal revenue at the close of the war, serving until June, 1869, when he resigned to become a member of the law firm of Shiras, Van Duzee & Henderson. He was

Assistant United States District Attorney for the northern division of Iowa about two years, and resigned in 1871. In 1882 he was elected as a Republican to the Forty-eighth Congress, and he was re-elected to the Forty-ninth, Fiftieth, Fifty-first, Fifty-second, Fifty-third, Fifty-fourth, Fifty-fifth, Fifty-sixth, and Fifty-seventh Congresses. He was elected Speaker of the House of Representatives, Dec. 4, 1899. Upper Iowa University has conferred upon him the degree of LL.D.

HOLLAND. (See NETHERLANDS.)

HONDURAS, a republic in Central America. The legislative power is vested in the Congress, a single chamber of 46 members, 1 to 10,000 of population, meeting biennially and elected for four years by universal male suffrage. The President of the republic is elected for four years by popular suffrage. Gen. Terencio Sierra was elected President in 1899 for the term ending in January, 1903, and Gen. José M. Reina was elected Vice-President. The following were members of the Council of Ministers in the beginning of 1900: Minister of Foreign Affairs, Dr. C. Bonilla; Minister of Public Works, F. Altschul; Minister of Justice and Public Instruction, Dr. E. C. Fiallos; Minister of Finance, D. Fortin; Minister of War, Gen. M. Rosales.

Area and Population.—Honduras has an area estimated at 45,250 square miles, with a population of about 407,000, mostly of Indian descent. Education is gratuitous, secular, and compulsory, for the school age being from seven to fifteen. There are 23 superior schools with 1,588 pupils besides a university at Tegucigalpa, and 683 elementary schools with 23,767 pupils. The Government spends on the latter \$139,000 a year.

Finances.—The bulk of the revenue is derived from duties on liquor and tobacco and from customs. The revenue for the year ending July 30, 1897, was \$2,388,500, and expenditure \$2,400,272. For 1898 the revenue amounted to \$3,049,365, of which \$1,263,654 came from internal revenue duties, \$1,059,116 from customs, \$192,148 from stamps, \$21,462 from taxation, and \$512,985 from various sources. For 1900 the revenue was estimated at \$2,388,500, and expenditure at \$2,400,272. The Government of Honduras contracted between 1867 and 1870 four foreign loans, on which interest ceased to be paid in 1872. On the first loan, which was £78,800 at 5 per cent., £100,470

interest was owing in the middle of 1898; on the second loan of 1897, which was £900,700 at 10 per cent., £2,341,820 of unpaid interest had accumulated; on the loan of 1869, which was £2,176,570 at 6 per cent., the arrears were £3,700,169; and on £2,242,500 borrowed at 10 per cent. in 1870 they were £5,830,500. The nominal principal amounted to £5,398,570; the defaulted interest reached £12,436,324 at the end of July, 1899. There is an internal silver debt amounting in 1899 to \$5,518,822.

Commerce and Production.—The chief crop grown for export is bananas; which are sent to New Orleans. Tobacco, sugar, coffee, and corn are cultivated, and to a less extent indigo, rice, and wheat. There are large herds of cattle in the interior. The mineral resources of the country are great, but undeveloped. Gold is washed from the river beds by the natives, and recently companies have been organized to conduct mining operations on a commercial scale. Silver, copper, lead, platinum, zinc, antimony, nickel, and iron ores are abundant. The scarcity of labor is the greatest obstacle to production. The people braid Panama hats and carry on other small industries and till the soil sufficiently to supply their necessities, but will not work steadily for hire. The value of the imports in 1898 was \$1,166,441 in gold; exports, \$1,235,952 in gold; the value of bananas being \$425,000, cattle \$117,000, coffee \$80,000, cacao \$72,000, and wood \$44,000. Of the total imports the value of \$816,622 came from the United States, \$132,000 from Germany, and \$103,914 from Great Britain; of the exports, \$988,987 went to the United States, \$21,470 to Germany, and \$11,596 to Great Britain. Gold bars of the value of \$28,937 were exported from Amapala, and silver bars of the value of \$967,273, silver coin to the amount of \$55,952, and \$29,150 worth of other metals.

Railroads, Posts, and Telegraphs.—The railroad from Puerto Cortez to La Pimienta, 60 miles, will be carried through to the Pacific coast and a line built from Puerto Cortez to San Lorenzo.

The post office in 1898 received 304,039 and sent out 337,589 internal letters, etc., and in the foreign service received 95,500 and sent out 200,548. There are 2,730 miles of telegraph line; the number of messages in 1898 was 458,593. There are telephones in the capital, Tegucigalpa, a town of about 14,000 inhabitants, and in some other places.

I

IDAHO, a Northwestern State, admitted to the Union July 3, 1890; area, 84,800 square miles; population in 1890, 84,385; in 1900, 161,772. Capital, Boise City.

Government.—The following were the State officers during the year: Governor, Frank Steunberger; Lieutenant Governor, J. H. Hutchinson; Secretary of State, Mart Patrie; Auditor, Bartlett Sinclair; Treasurer, Lucius C. Rice; Attorney-General, S. H. Hays; Adjutant-General, J. N. Weaver; State Engineer, D. W. Ross; Superintendent of Schools, Permeal French; Mine Inspector, Jay A. Czizek—all fusionists; Chief Justice of the Supreme Court, J. W. Huston; Associate Justices, J. N. Sullivan and Ralph P. Quarles; Clerk, Solomon Hasbrouck.

Population.—The population of the State in 1900, by counties, was as follows: Ada, 11,559; Blaine, 11,702; Bear Lake, 7,051; Bingham, 14,447; Blaine, 4,900; Boise, 4,174; Cañon, 7,497; Cassia, 3,951; Custer, 2,849; Elmore, 2,286; Fremont, 12,821; Idaho, 9,921; Kootenai, 10,216;

Latah, 13,451; Lemhi, 3,446; Lincoln, 1,784; Nez Percés, 13,748; Oneida, 8,933; Owyhee, 3,804; Shoshone, 11,950; Washington, 6,882; total, 161,772.

Finances.—The State's bonded debt is \$427,500. The floating debt is all provided for, and cash is being paid for warrants as presented. Sinking funds to pay the bonded debt amount to \$75,000. The bonds are to be paid as fast as the option of the State matures. The bonds run twenty years, with the option to pay at the end of ten years. The first bonds to which the State applied its option were the \$11,000 wagon-road bonds of 1889, which were paid July 1. C. J. Bassett, Commissioner of Immigration, Labor, and Statistics, in his latest report says: "The present is the first time in the history of the State that it has been on a cash basis. The tax levy for State purposes has been cut down from 86 cents on the \$100 valuation to about 52 cents."

Valuation.—The total assessed valuation of the State, as equalized, is \$47,545,905.82, an increase of \$825,915.43 over 1899. The total acreage of

patented lands in 1900 was 2,587,259, with a valuation, as equalized, of \$12,631,359.55. The total valuation of county assessments, as equalized in 1900, is \$38,444,937.49, exclusive of railroad, telegraph, and telephone assessments, which are, respectively, \$8,931,115, \$84,692.68, and \$85,160.65, making a total of \$47,545,905.82, against \$46,719,990.39 in 1899. The amount of State tax levied for 1900 was \$245,000. The value of mines and mining improvements, as given by the assessors, amounts to \$1,214,211.

Mineral Yield.—The State official reports of the output of precious metals in 1899, with comparisons from 1898, reaches the following showing: Gold—1899, \$1,550,958; 1898, \$1,895,566. Silver—1899, \$2,688,102; 1898, \$6,796,541. Total, 1899, \$4,239,060; 1898, \$8,692,107. The output of lead, 1899, was valued at \$3,760,553. The grand total for gold, silver, lead, and copper reached \$11,163,928. That is \$2,427,350 less than the State's output for 1898, the decrease being due very largely to the falling off in Owyhee and Shoshone Counties. The fact that the Black Jack mine was closed down last year accounts for a large portion of the Owyhee decrease, and the labor troubles in Shoshone County are accountable for the falling off there. The value of the copper output for 1899 was \$60,000. The number of quartz mills in the State is 79.

Railroads.—The amount of railroad mileage is 1,291.82 miles, the three counties having the greatest mileage being Kootenai, 258.96 miles; Bannock, 124.53; and Lincoln, 116.75. In southeastern Idaho 51 miles of new railroad have been built, connecting the town of St. Anthony with the Short Line system at Idaho Falls. This road was constructed by the Short Line because of the rapid development of the rich agricultural region through which it passes.

Telegraphs and Telephones.—There are 1,200.77 miles of telegraph line in Idaho. The telephone wires reach 1,232 miles, with 985.50 of additional wires.

Live Stock.—From the reports of the county assessors it appears that the State contains 102 mules, 170,476 cattle, 25,497 hogs, 80,390 horses, and 1,247,693 sheep.

Irrigation.—The greatest irrigation enterprise in the Northwest has been launched in Idaho. Water is to be taken from Snake river to irrigate the vast fertile plains on either side of the stream in the vicinity of Shoshone Falls. The project is to reclaim the land under the Carey act and the State legislation supplementary thereto, and it has progressed so far that the segregation of the land by the State has been made. Altogether, 248,000 acres of land have been withdrawn from entry to be reclaimed by the proposed canal system, and of this 200,000 acres are arable and of the highest fertility and can be recovered from the canals projected. The proposed canal on the north side of the river is to be 20 miles long and 25 feet wide on the bottom, and will carry 400 second feet. On that side the State has segregated 31,000 acres, and 2,000 acres of school land are also covered. On the south side the canal will swing back toward the hills and cover the entire Rock Creek section. It will be 90 feet wide on the bottom, and will carry a stream 9 feet deep, or 3,000 second feet. It will be 65 miles long, ending at Salmon river. On that side the State has filed on 217,000 acres of land. In addition, 18,000 acres of school land are covered. The cost of the dam and canals will be about \$1,500,000.

The Prison.—The total expenditure for the State Penitentiary amounted to \$39,819.80 for the fiscal year. From this amount \$14,028.38 is de-

ductable as not being chargeable to maintenance, leaving \$25,791.42 as the net cost. The average daily number of prisoners was 150½, the whole number of prison days served 54,854, making the average daily cost per capita 47½ cents. On Nov. 30 there were in the prison 147 State prisoners and 9 United States prisoners; total, 156.

Insane.—The number of patients remaining at the Blackfoot Institution on Sept. 30 was as follows: Male, 118; female, 74. This represents about the average number of patients.

Labor Troubles.—The report of the congressional Committee on Military Affairs, which conducted an investigation of the Cœur d'Alene labor agitation, was submitted on June 5, having been approved by a majority vote of the committee, the minority favoring a substitute report. The majority report says:

"1. The Governor of Idaho, in his efforts to establish order and enforce the laws of the State, is to be commended for his courage and fearlessness. The blind hatred excited by the mob, the consequent disturbance of public business, and the reign of lawlessness are in a fair way to be adjusted. The citizens of Idaho are to be congratulated on the removal of a dangerous cancer that has long threatened the peace and order of the State. The better ideas that prevail as to the rights and duties of men in relation to the preservation of society and this improved condition of affairs are in a great measure due to the conduct of the Governor of that State.

"2. The conduct of the military from May 2 to the present, amid the disturbing elements of the Cœur d'Alenes, when fierce passions flamed unchecked, when no hand was raised to stay the dynamiter and the murderer, where the mob has been supreme, is a matter of earnest congratulation to the country."

The report takes up in detail the various meetings of the miners' unions the day before and on the day the Bunker Hill mill was blown up with dynamite, the distribution of firearms and masks, and the march on the mill. "This," it says, "was accomplished with military precision under direct command of leaders and without any delay, from which fact, and from the evidence adduced at the Corcoran trial, it is found that there existed in the mining district of the Cœur d'Alenes a widespread, deep-seated, and thoroughly organized conspiracy."

The report says the district had been in a state of insurrection since 1892, and the condition in 1899 culminated in the violent state of insurrection and riot. The Legislature could not have been convened to meet the emergency, and the committee holds that "under the circumstances the Governor was warranted in calling on the President for troops."

As to the President's course, the report says: "It is conceded on all sides that the President of the United States was justified in sending troops to Shoshone County, Idaho, in response to the application of the Governor. The United States troops have now gone into garrison 8 miles from the scene of the trouble, and they are retained at the request of the Governor, supported by a petition of 1,500 citizens.

"None of the charges pending against the United States army and its officers in Idaho, as set forth in the various paragraphs of the resolution, have been sustained by the testimony. The military force in Shoshone County, under command of Gen. Merriam, was used strictly in aid of the civil authorities. The sheriff and many other county officials were in collusion with the rioters, and therefore civil authority could not be enforced.

ome of the county officials were afterward duly removed from office by judicial process because of said collusion and malfeasance in office. The United States army and its officers acted strictly within their instructions and the law. President McKinley and the War Department exercised every precaution, and the military acted solely within the Constitution and did not encroach in the distinct sphere of the civil authorities."

Political.—The vote of the State at the election of November was as follows: For presidential electors—Democratic, 29,414; Republican, 27,198. For Supreme Judge—C. O. Stockslager (Democratic), 28,164; E. C. Steele (Republican), 26,501. For Governor—Frank W. Hunt (Democrat), 28,728; D. W. Standrod (Republican), 26,468. The remainder of the Democratic ticket was elected. The State officers to succeed in January, 1901, were: Governor, Frank W. Hunt; Lieutenant Governor, T. F. Terrel; Secretary of State, C. J. Bassett; Auditor, E. W. Jones; Treasurer, J. J. Sumner; Attorney-General, Frank Martin; Superintendent of Instruction, Permeal French; Mine Inspector, M. H. Jacobs.

ILLINOIS, a Western State, admitted to the Union Dec. 3, 1818; area, 56,650 square miles. The population, according to each decennial census, was 55,162 in 1820; 157,445 in 1830; 476,183 in 1840; 851,470 in 1850; 1,711,951 in 1860; 2,539,141 in 1870; 3,077,871 in 1880; 3,826,351 in 1890; and 4,821,550 in 1900. Capital, Springfield.

Government.—The following were the State officers during the year: Governor, John R. Tanner; Lieutenant Governor, William A. Northcott; Secretary of State, James A. Rose; Auditor, James S. McCullough; Treasurer, Floyd K. Whittemore; Attorney-General, Edward C. Akin; Superintendent of Public Instruction, Alfred Baynes; Adjutant General, J. N. Reece; Superintendent of Insurance, James R. B. Van Cleave; Print-Expert, John H. Barton; Chief Justice, James H. Cartwright—all Republicans; President of Board of Agriculture, W. H. Fulkerson; Board of Arbitration, H. R. Calef, D. J. Keefe, and J. S. Forman; President of Board of Health, B. Johnson; Justices of Supreme Court, C. C. Oggs, J. J. Phillips, J. W. Wilkin, J. N. Carter, M. Craig, and B. D. Magruder. The following additional State officers were created by act of April 24, 1899: Food Commissioner, A. H. Jones; Game Commissioner, Henry W. Loveday; Superintending Architect, R. Bruce Watson; Board of Inspectors of Commission Merchants, W. H. Whitcomb, J. W. Stanton, A. M. Crawford, Joseph Newman, and A. M. Smith.

Population.—The population of Illinois in 1900, according to the bulletins of the Federal census, was 4,821,550, against 3,826,351 in 1890, an increase of 26 per cent. The population by counties was: Adams, 67,058; Alexander, 19,384; Bond, 10,078; Boone, 15,791; Brown, 11,557; Bureau, 1,112; Calhoun, 8,917; Carroll, 18,963; Cass, 1,222; Champaign, 47,622; Christian, 32,790; Clark, 24,033; Clay, 19,553; Clinton, 19,824; Coles, 1,146; Cook, 1,838,735; Crawford, 19,240; Cumberland, 16,124; DeKalb, 31,756; Dewitt, 18,972; Douglas, 19,097; Dupage, 28,196; Edgar, 28,273; DeWitt, 20,465; Fayette, 28,065; Ford, 18,359; Franklin, 19,675; Fulton, 46,201; Gallatin, 15,836; Greene, 23,402; Grundy, 24,136; Hamilton, 20,197; Hancock, 32,215; Hardin, 7,448; Henderson, 10,836; Henry, 40,049; Iroquois, 38,014; Jackson, 33,871; Jasper, 20,160; Jefferson, 28,133; Jersey, 14,612; Jo Daviess, 24,533; Johnson, 15,667; Kane, 78,792; Rankakee, 37,154; Kendall, 11,467; Knox, 43,612; Lake, 34,504; LaSalle, 87,776; Lawrence, 16,523; Lee, 29,894; Livingston, 42,035; Logan, 28,680;

McDonough, 28,412; McHenry, 29,759; McLean, 67,843; Macon, 44,003; Macoupin, 42,256; Madison, 64,694; Marion, 30,446; Marshall, 16,370; Mason, 17,491; Massac, 13,110; Menard, 14,336; Mercer, 20,945; Monroe, 13,847; Montgomery, 30,836; Morgan, 35,006; Moultrie, 15,224; Ogle, 20,129; Peoria, 88,608; Perry, 19,830; Piatt, 17,706; Pike, 31,595; Pope, 13,585; Pulaski, 14,554; Putnam, 4,746; Randolph, 28,001; Richland, 16,391; Rock Island, 55,249; St. Clair, 86,685; Saline, 21,635; Sangamon, 71,593; Schuyler, 16,129; Scott, 10,455; Shelby, 32,126; Stark, 10,186; Stephenson, 34,933; Tazewell, 33,221; Union, 22,610; Vermilion, 65,635; Wabash, 12,583; Warren, 23,163; Washington, 19,526; Wayne, 27,626; White, 25,386; Whiteside, 34,710; Will, 74,764; Williamson, 27,796; Winnebago, 47,845; Woodford, 21,822.

Valuations.—The total assessment of the counties for 1900, as given by the Auditor, was \$779,513,978, against \$895,869,690 for 1899. The decrease is accounted for by alleged evasions of property owners, a new law intended to secure accurate returns having proved ineffectual. Detailed published statements from the reports of the State Board of Equalization, which adjourned on Dec. 3, show the following figures for 1900: Lands, \$265,588,643; lots, \$304,031,170; personal property, \$157,426,634; capital stock, \$4,808,630; railroads, \$77,928,418.

Banks.—In May the State Auditor had received statements of the condition of all the State banks. One hundred and fifty-seven showed total resources and liabilities of \$207,576,168.25. This included the following items: Resources—loans and discounts, \$119,171,187.20; United States bonds, including premiums, \$641,865.34; other bonds and securities, \$25,902,864; other real estate, \$1,040,595.77; gold coin, \$5,383,292.15; gold Treasury certificates, \$7,403,125; silver coin, \$307,700.85; silver Treasury certificates, \$1,267,649; national bank currency, \$4,415,925; legal tender and Treasury notes, \$2,521,151. Liabilities—capital stock, \$18,432,000; surplus fund, \$7,141,201.43.

In August the Auditor published the following figures in his report as to the condition of 139 State banks for the year ending June 30, 1900: Capital, July 1, 1899, \$16,887,000; surplus, \$6,929,558; undivided profits, \$4,794,014; total investments consisting of loans, bonds, stocks, and realty, \$146,698,062; total investments consisting of part of reserve due from banks, \$37,690,909; gross earnings for the twelve months, \$8,774,891; net earnings for the twelve months, \$2,876,134. Of the 139 banks, 117 report dividends paid during the twelve months, amounting to \$1,385,470. The percentage of dividend per capital, surplus, and undivided profits was 5.3, and the percentage of dividend per capital was 9 per cent.

Agriculture.—In June the State Department of Agriculture issued a report, which included an interesting account of Illinois's agricultural fairs held in 1899. The totals represent results at 70 distinct fair holdings, including the State fair. The total entries of cattle exhibited were 3,555; horses and equestrianism, 7,917; sheep, 2,533; hogs, 4,227; poultry, 11,869; farm products, 25,430; horticulture and floriculture, 7,880; fine arts, 8,399; textile fabrics, 20,477; dairy products, 7,457. The entries reached a total of 111,169. The amount of premiums offered was \$241,704.10, and the amount of premiums actually paid was \$168,617.38.

Arbitration.—In March the miners and operators of Illinois came to an agreement on the scale of wages to govern the mines of Illinois for the year beginning April 1, 1900. The advance of 9 cents for pick mining, as provided for in the

international agreement, was granted in every district except the thin veins of northern Illinois and the Fulton and Peoria County districts, the differential for machine mining to be 7 cents. This scale began April 1.

Early in November, 1899, there was a strike at the piano and organ factory of Story & Clark, in Chicago, and three days later all the other piano and organ factories in Chicago were closed by their proprietors. The number of employees thus thrown out of employment was about 3,500, whose aggregate earnings prior to the strike and lockout had averaged about \$45,000 a week. The trouble had its origin with the action of the Piano and Organ Workers' Union in making a large number of demands to which the manufacturers refused to accede. On Nov. 21 the board received by mail from Charles Dold, business agent of the Piano and Organ Workers' Union, a petition for arbitration, purporting to be signed by a majority of the employees of the several manufacturers. The board, after an unavailing effort to induce the manufacturers to join in the petition, proceeded to make an investigation. The points of difference set forth in the petition were: (1) A nine-hour work day; (2) restoration of former wages (wages paid up to 1892); (3) payment of wages in lawful money; (4) a weekly pay day; (5) regulation of the apprentice system; (6) abolition of the contract and subcontract system; (7) abolition of the piecework system; (8) all future differences to be settled by arbitration.

In the board's report the following recommendations were made: (1) That the strike at the factory of Story & Clark and the lockout at all other factories be declared off immediately; (2) that work be resumed at all factories at once; (3) that all the employees at work at the time of the strike and lockout be re-employed without discrimination; (4) that a day's work in all the factories in all departments shall consist of nine hours; (5) that in case of a difference involving a proposed increase in wages, each employer shall meet a committee of his employees and endeavor to settle such difference by mutual agreement.

The manufacturers expressed their willingness to resume operations upon the terms recommended. The employees, however, rejected the decision on the ground that it did not provide for the recognition of the union. The suspension of work was thereupon continued. Eventually the Federation of Labor instituted an inquiry, and agreed, in a letter to the union, upon the following terms of settlement: "Your union is to declare the strike off in Story & Clark's. The manufacturers will declare off the lockout. Nine hours to constitute a day's work in all the piano and organ factories in Chicago. The reinstatement of all the old employees without discrimination, the manufacturers being glad to meet their old employees in their respective shops, and wherever differences as

to wages exist to take them up and adjust them and upon the adjustment of the differences work to be resumed."

The men still refused to go to work, standing out for the formal recognition of their union. Several weeks later, however, operations were resumed at all the factories on the basis recommended by the board and approved by the president and treasurer of the Federation of Labor.

Charities.—In the Illinois Institute for Education of the Blind, at Jacksonville, the number of pupils enrolled during the biennial period ending June 30, 1900, was 291. Of these, 19 were adult males admitted as apprentices in the school department; 5 were adult females admitted to the manual training department. The remainder were in the school proper during a portion of each school year. Of the members of the school, 159 are males and 108 are females.

At the Illinois Soldiers' and Sailors' Home, Quincy, the average attendance for the two years ending June 30 was 1,532, and the average cost of maintenance was \$103.76. The actual amount expended for the ordinary expenses of the home during the past two years is \$318,177.57. During the same period there has been received, or is due, from the General Government, \$306,475.

The report of the Illinois Soldiers' Orphan Home, Normal, shows as present, June 30, 1900, 186 males and 127 females. The ordinary expenses for the year ending June 30, 1899, were \$57,422.50.

The Soldiers' Widows' Home of Illinois, Vandalia, on June 30, had 49 inmates, with others approved and awaiting admission.

The Illinois Asylum for Feeble-minded Children, on July 1, had 756 inmates, the average daily attendance, 1898-1900, being 765. In addition, 1,943 were awaiting admission.

The four State asylums or hospitals for the insane make the following reports: Eastern, Kankakee, 1,893 males, 1,646 females (1898); Western, Watertown, 328 males, 292 females (1900); Central, Jacksonville, 643 males, 622 females (1900); Northern, Elgin, 538 males, 564 females (1900).

Education.—The school statistics for the year ending June 30, as issued by the Superintendent of Public Instruction, include the following figures: Persons under twenty-one years of age—males, 1,130,254; females, 1,110,091; increase in two years, 21,029. Children enumerated between the ages of six and twenty-one—males, 804,843; females, 784,038; increase in two years, 31,000. Pupils enrolled in schools—males, 483,792; females, 475,119; increase in two years, 19,748. Average daily attendance, 737,576; increase in two years, 8,349. Average number of days public schools were kept, 160.4; increase in two years, 1.7. Buildings used for schoolhouses, 12,809; increase in two years, 69. Pupils enrolled in private and parochial schools, 142,496; decrease in two years, 799. Public school teachers employed—males, 6,950; females, 19,363; increase in two years, 1,000. Average monthly salaries of teachers—males, \$60.34; females, \$52.45.

Balance on hand June 30, 1899 (district fund), \$4,535,741.81. Receipts for the year ending June 30, 1900—for income of township fund (rent of school lands and interest on school notes), \$900,183.47; from State appropriations, \$1,000,000; from district taxes, \$15,909,436.67; from sales of bonds, \$5,769.14; from all other sources, \$769,229.84; total receipts from all public money, excluding balance on hand, \$19,169,619.59. Total expenditures, \$19,327,121.12; cash on hand, June 30, 1900, \$5,424.28.

Fisheries.—The fourth annual report of the Illinois Fishermen's Association was issued



RICHARD YATES,
GOVERNOR OF ILLINOIS.

bruary. It includes the output from 22 places Illinois river. This represents only a portion the fish taken from that river and used commercially. The report includes only such fish as have been handled by members of the association. The fish included in this report have nearly all come to Eastern markets, and the showing is a substantial increase over the last report. The total weight of the year's catch was 11,205,516 pounds, valued at \$362,246.77.

Insurance.—In February the State Insurance Superintendent reported: Companies doing a general fire, marine, and inland navigation insurance business in this State at this date are as follows: Illinois joint stock fire and marine companies, 6; Illinois mutual fire insurance companies, 11; joint stock fire and marine insurance companies of other States, 126; foreign fire and marine insurance companies, 48; mutual fire insurance companies of other States, 12; total, 203. This shows a net gain of 2 companies, compared with the number at the date of the last report.

The result of the past year shows a large addition to the volume of business written and carried by fidelity, surety, and casualty companies in this State. Exclusive of the industrial business transacted by the 2 companies, the new business written during 1899 in this State exceeded that written during 1898 by 9,929 policies and \$15,348,281 of insurance. There is shown a net increase of insurance in force of \$54,664,212 on \$95,387,490 of new insurance written during the year. This net increase is 57 per cent. of the new business written, against 47 per cent. in 1898 and 28 per cent. in 1897.

In the entire industrial business of the companies carrying on this branch of business 536,987 policies and \$88,670,430 more insurance were written in 1899 than in 1898. The net increase in insurance in force at the end of the year was \$5,600,322.

The total business of all companies for 1899, compared with the business of 1898, shows an increase in total income of \$37,998,853.61, an increase in total expenditures of \$24,345,208.25, an increase in total admitted assets of \$130,328,487.26, an increase in total liabilities of \$119,981,221.03, an increase in total surplus of \$10,347,266.23. At the date of the last report 40 life and 10 dent-assessment companies were authorized to do business in Illinois. One company has been organized in the State. The last report showed 82 fraternal societies in the State.

Building and Loan Associations.—Official reports show the total assets of 599 associations, in 1899, as \$54,104,602.06.

Railroads.—From the report of the Railroad Warehouse Commission for the year ending June 30, 1899, made public in February, 1900, it appears that the total mileage in Illinois, including tracks of steam railroads, is 16,417.87, an increase over 1898 of 288.11. The total mileage of graded and interurban lines reported to the commission is 97.06 miles. The total capital of the steam railroads at the close of the fiscal year, June 30, 1899, was \$3,038,929,900, which shows an increase over that of 1898 of \$319,318,144. The total railway capital of the elevated and interurban lines for the year ending June 30, 1899, reported to the commission is \$75,926,852.

The gross earnings from operation of all steam railroads entering Illinois for the fiscal year 1899 is \$5,580,535, which is an increase over the fiscal year of 1898 of \$67,248,805. The total increase in the gross earnings of the steam, elevated, and interurban lines over the fiscal year 1898 was \$332,632.

The operating expenses of the steam roads were \$44,393,463 more than for 1898. The number of passengers carried by the roads reporting was 37,329,824, and the passenger earnings per mile were \$1.963. The number of tons carried by the steam roads reporting was 73,335,755; freight earnings per mile of road, \$5.012.

Mining.—The coal mining statistics for 1899, published in May, 1900, show that 36,991 men were employed, the tonnage product being 23,434,445, and the number of days of actual operation 205.7. The price paid per ton for mining is given as 47.1 cents; value of coal per ton at the mine, 91.86 cents.

Military.—The report of the Adjutant General, made public in January, says that the militia consists of 7 regiments of infantry, 1 battalion of colored infantry, 1 regiment of cavalry, 3 batteries of artillery, 1 engineer company, 1 signal corps, and 1 hospital corps.

Political.—The canvass of the vote at the election held on Nov. 6 shows McKinley's plurality over Bryan in the State to be 94,924, and his majority over all the candidates 64,073. Yates's plurality over Alschuler for Governor was 61,233, and his majority over all the gubernatorial candidates 33,570.

The total vote for electors, reckoned by the highest on each ticket, was: Herbert, Republican, 597,985; Schubert, Democrat, 503,061; Bannen, Prohibitionist, 17,626; Randolph, People's, 1,141; Louis, Socialist-Labor, 1,373; Wullner, Socialist-Democratic, 9,587; Struble, United Christian, 352; Dean, Union Reform for Direct Legislation, 672.

The total vote on Governor was: Yates, Republican, 580,199; Alschuler, Democrat, 518,966; Barnes, Prohibitionist, 15,643; Van Tine, People's, 1,106; Hoffman, Socialist-Labor, 1,319; Perry, Socialist-Democratic, 8,611; Cordingley, United Christian, 334; Spencer, Union Reform, 650; total, 1,126,828.

INDIA, an empire in southern Asia, under the sovereignty of the King of Great Britain and Ireland, who bears the title of Emperor of India, on the basis of a personal union, and governed under general acts of the British Parliament by a Governor General in consultation with and under instructions from the Secretary of State for India, a member of the British Cabinet. The Governor General, popularly called the Viceroy, is advised by a Council of 5 ordinary members, besides the commander in chief of the forces, who are appointed for five years. The Legislative Council, composed of the members of the Governor General's Council and 16 additional members appointed by him on the recommendation of certain public bodies, has power to make laws subject to the approval of the Governor General and the Secretary of State, for all persons within British India, for all British subjects in the native states, and for native Indian subjects of the King in foreign countries. British India is divided for purposes of administration into the presidencies of Madras and Bombay, each of which has a governor, the lieutenant governorships of Bengal, the Northwest Provinces and Oudh, the Punjab, and Burma, and the chief commissionerships of Coorg, Assam, and the Central Provinces. Each governor and lieutenant governor has a legislative council. The nine provinces are subdivided into about 250 districts. More than 600 feudatory native states are subject to the control of the Governor General.

George Nathaniel Curzon, created Baron Curzon of Kedleston, succeeded the Earl of Elgin as Governor General in 1898. The members of the Council in the beginning of 1900 were Major-Gen. Sir

E. H. H. Collen, Sir A. C. Trevor, C. M. Rivaz, Sir Edward Fitzgerald Law, and Thomas Raleigh. Gen. Sir W. S. A. Lockhart was commander in chief of the forces. The Governor of Bombay was Sir Henry Stafford Northcote; Governor of Madras, Sir A. E. Havelock; Lieutenant Governor of Bengal, Sir John Woodburn; Lieutenant Governor of the Northwest Provinces and Oudh, Sir A. P. Macdonnell; Lieutenant Governor of the Punjab, Sir W. M. Young; Lieutenant Governor of Burmah, Sir F. W. R. Fryer; Chief Commissioner of the Central Provinces, D. C. Ibbetson; Chief Commissioner of Assam, H. J. S. Cotton; Chief Commissioner of Coorg and Resident of Mysore, Col. D. Robertson; Resident at Hyderabad, Sir T. J. C. Plowden.

Area and Population.—The area of British India is 965,005 square miles, and the population in 1891 was 221,289,445, of whom 71,346,987 were in Bengal, 46,905,085 in the Northwest Provinces and Oudh, 20,866,847 in the Punjab, 5,476,833 in Assam, 542,358 in Ajmere and Merwara, 35,630,440 in Madras, including the Laccadive Islands, 18,857,044 in Bombay and Sind, 44,079 in Aden and Perim, 10,784,294 in the Central Provinces, 2,897,491 in Berar, 173,055 in Coorg, 4,658,627 in Lower Burmah, 3,063,426 in Upper Burmah, 15,609 in the Andaman Islands, and 27,270 in the district of Quetta. The feudatory states had a total area of 992,000 square miles, with 69,286,000 inhabitants, making the total area of the Indian Empire 1,957,000 square miles and the total population at the last census 290,575,445.

Of the population of British India 112,542,739 were males and 108,630,213 females; of the population of the native states, 34,184,557 were males and 31,865,922 females. Of the total male population of India, amounting to 146,700,000, the number reported as married was 62,100,000, widowed 6,400,000, unmarried 65,100,000, and 13,100,000 were not reported; of the female population, 140,500,000 in number, 62,400,000 were married, 22,700,000 widowed, 43,600,000 unmarried, and 11,800,000 not reported. The birth rate in 1897 as near as the imperfect registration indicates was 36.94 per thousand and the death rate 32.94 in Bengal, the birth rate 31.10 and the death rate 40.46 in the Northwest Provinces and Oudh, the birth rate 42.00 and the death rate 31.05 in the Punjab, the birth rate 26.80 and the death rate 69.34 in the Central Provinces, the birth rate 31.82 and the death rate 26.26 in Lower Burmah, the birth rate 32.59 and the death rate 50.61 in Assam, the birth rate 28.70 and the death rate 25.40 in Madras, and the birth rate 33.46 and the death rate 39.84 in Bombay. The number of coolie emigrants from India was 17,185 in 1891, 13,751 in 1892, 12,636 in 1893, 17,932 in 1894, 13,103 in 1895, 12,148 in 1896, 10,712 in 1897, and 10,306 in 1898. The number of scholars receiving instruction in India in 1891 was 3,195,220, of whom 2,997,558 were males and 197,662 females; the number not under instruction who were able to read and write was 12,097,530, of whom 11,554,035 were males and 543,495 females; the number of those who were not able to read and write was returned as 246,546,176, of whom 118,819,408 were males and 127,726,768 were females, and 25,384,505, comprising 13,356,295 males and 12,028,210 females, were not reported. The expenditure on education in 1898 was Rx 3,554,026, having risen from Rx 67,100 in 1865. Of the amount expended in 1898 the sum of Rx 567,120 came from local rates, Rx 146,972 from municipalities, Rx 851,255 from subscriptions and endowments, Rx 1,058,214 from fees, and Rx 930,464 from provincial revenues. The Indian universities are examining bodies having supervision over

numerous colleges. In all the provinces are training schools for teachers. The following numbers of students were matriculated in the universities in 1898: Calcutta, 2,721; Madras, 1,515; Bombay, 1,042; Punjab, 1,082; Allahabad, 637. There were 160 colleges with 19,192 male students and 4 with 118 female students, 4,883 secondary schools with 509,125 male scholars and 450 with 42,016 female scholars, 388 training and special schools with 21,604 male scholars and 70 with 2,468 female scholars, 94,827 public primary schools with 2,788,367 male scholars and 5,680 with 316,216 female scholars, and 41,083 private schools with 536,521 male scholars and 1,284 with 38,648 female scholars, making the total number of 148,829 schools, with 4,274,275 scholars, 3,874,809 males and 399,466 females. The number of vernacular newspapers in 1897 was 758, printed in Hindi, Bengali, Marathi, Telugu, Sanskrit, Tamil, Gujrathi, Sindhi, and twelve other languages.

Finances.—The revenue in 1898 was Rx 96,442,004 and the expenditure Rx 101,801,215, of which Rx 76,481,391 were expended in India and Rx 25,319,824 in England. The revenue of the Government of India was Rx 17,249,537, and the expenditure of the General Government was Rx 25,088,712; the revenue of the Central Provinces was Rx 2,120,483, and expenditure Rx 2,932,356; the revenue of Burmah was Rx 6,368,294, and expenditure Rx 4,185,849; the revenue of Assam was Rx 1,341,107, and expenditure Rx 986,098; the revenue of Bengal was Rx 20,288,493, and expenditure Rx 10,324,105; the revenue of the Northwest Provinces and Oudh was Rx 11,183,480, and the expenditure Rx 6,702,003; the revenue of the Punjab was Rx 9,015,123, and expenditure Rx 5,069,422; the revenue of Madras was Rx 14,142,046, and expenditure Rx 10,209,315; the revenue of Bombay was Rx 14,430,724, and expenditure Rx 10,982,631; the receipts in England were Rx 193,662, and expenditure in England Rx 16,198,263; the gain by exchange on receipts in England was Rx 109,055, and loss by exchange on remittances to England Rx 9,121,561. The land revenue in 1898 was Rx 25,683,642, not reckoning the addition charged on account of irrigation; opium revenue, Rx 5,179,772; revenue from salt, Rx 8,594,225. The land revenue in the parts of India where it was fixed permanently a century ago, comprising most of Bengal, a quarter of the area of Madras, and certain districts in the Northwest Provinces, is about 20 per cent. of the renting value of the land, averaging two thirds of a rupee per acre. In the rest of India the assessment, readjusted at intervals of twelve to thirty years, averages 1½ rupee per acre, amounting to half the rental.

The revised estimates for the year ending March 31, 1899, made the total revenue Rx 101,566,100 for that year, the land revenue yielding according to the estimate Rx 27,679,400, opium Rx 5,679,400, salt Rx 9,047,200, stamps Rx 4,839,900, excise Rx 5,731,000, provincial rates Rx 3,952,100, customs Rx 4,898,400, assessed taxes Rx 1,930,100, forests Rx 1,838,000, registration Rx 454,000, tribute Rx 939,700, interest Rx 970,100, post office and telegraphs Rx 3,054,400, civil departments Rx 1,748,400, miscellaneous sources Rx 984,700, railroads Rx 22,736,400, irrigation Rx 3,461,700, buildings and roads Rx 696,400, military departments Rx 924,800. The total expenditure for 1899 according to the revised estimates was Rx 97,506,700; excluding Rx 1,417,900 of provincial balances it was Rx 96,088,800, of which interest took Rx 3,076,800, refunds and compensation Rx 1,853,400, charges of collection Rx 8,558,900, the post office, telegraphs, and mint Rx 2,890,900, civil salaries Rx 15,715,900, miscellaneous civil charges Rx 5,-

2,000, famine relief and insurance Rx 1,176,100, road construction charged against revenue Rx 90, railroad revenue account Rx 23,614,500, irrigation Rx 3,222,100, buildings and roads Rx 5,842, the army Rx 24,051,300, and defense works Rx 8,400. The budget estimate of revenue for the year ending March 31, 1900, was Rx 101,961,500, expenditure Rx 98,953,600, which was reduced Rx 98,028,900 by receipts from provincial balances amounting to Rx 924,700. The provinces in 1899 received grants amounting to Rx 1,129,300 out of their resources, which had been exhausted by special expenditures occasioned by famine, plague, and earthquake. The deficit of Rs 5,359,211 in 1898 is attributable to these causes due to the war on the northwest frontier. The cessation of the war and the good harvests of 1897 were as a great relief to Indian finance, warranting the expectation of a considerable surplus in 1899 and 1900. The surplus realized in 1899, estimated at £2,700,000, counting 15 rupees to the pound sterling, was actually £2,640,000. For 1900 a surplus of £2,600,000 was looked for also before the failure of the monsoons deranged all calculations. The expenditure incurred in connection with the famine, together with remissions of revenue, amounted to nearly £3,500,000 up to March 1900, of which £730,000 was available for direct famine relief out of the famine insurance fund, leaving the net cost of the famine £2,631,000. The famine, however, was so much better than the estimate that this loss was balanced by gains and the year closed with a surplus of £2,800,000. After the summer monsoon first broke in 1900 the Finance Minister, Clinton Dawkins, counted a deficit of only £826,000 for the financial year notwithstanding the loss of revenue inflicted by drought. This estimate included an additional advance of £1,200,000 for famine relief and reversion of land revenues on account of the lateness of the intermission of the monsoon on the west coast. The Government had a balance of £9,000 unexpended of the loan authorized in 1897 decided to raise a new loan of £3,000,000. A loan of Rx 3,000,000 at 3½ per cent. was subscribed in Bombay at the rate of 94. The cost to the Government of the famine of 1900 up to July was £6,189,000 for direct relief, £3,400,000 for reversion of land revenue, £2,346,000 loaned to five states, and £1,100,000 for advances to individuals. The failure of the British public to respond to the Viceroy's appeal for contributions to supply seed and plow cattle and to succor the orphaned, aged, and those who shrank from receiving the form of public relief offered drove the Government to include these objects in its scheme of relief. A motion made in the British House of Commons for a grant in aid of £5,000,000 to the Indian Government in its emergency was defeated by the ministry and voted down by a majority of 112 to 65. The debt of British India on March 31, 1898, amounted to Rx 242,989,003, of which Rx 111,034 was permanent debt in India, Rx 117,880 permanent debt in England, and Rx 14,989 unfunded debt in India.

Defense.—The military forces in India in 1898 numbered 5,194 European and 3,209 native officers and 106,525 noncommissioned officers and privates; of all ranks, 214,928. The British army in India had a strength of 3,616 officers and 70,672 men or 74,288 of all ranks, composed of 914 officers and staff, 9 cavalry and 52 infantry generals and 1,000 general officers unemployed, 14 invalid and veterinary officers and men, 491 officers and 12,916 men in the Royal Artillery, 261 cavalry officers and 1,000 men, 347 officers and 158 men of the Royal

Engineers, and 1,508 infantry officers and 52,180 men. The native army consisted of 1,578 European and 3,209 native officers and 135,853 noncommissioned officers and men, a total strength of 140,640, made up of 33 native and 54 European officers and 2,001 men in the artillery, 358 European and 619 native officers and 21,955 men in the cavalry, 65 European and 488 native officers and 3,142 men in the sappers and miners, and 1,122 European and 2,048 native officers and 108,755 men in the infantry. The estimates for 1900 provided for a total strength of 219,369 of all ranks, composed of 788 miscellaneous officers, 17,896 artillery, 28,975 cavalry, 4,462 engineers, and 167,248 infantry. The British army was depleted in 1900 by drafts of troops for service in South Africa and to replace garrisons that were sent to South Africa. In July the British Government ordered three new regiments of native infantry to be raised for the garrisoning of colonial stations like Mauritius and Singapore. A regiment of sepoys was sent to Mauritius to take the place of the Central African regiment that had come into conflict with the Indian inhabitants of that colony. Sepoys of the Bengal and Punjab commands were passed into the reserve in order to train new recruits.

The European and Eurasian volunteer bodies on March 31, 1899, had 30,749 men enrolled, of whom 28,346 were counted as efficient, 1,802 being in the Punjab, 12,230 in Bengal, 8,744 in Madras, and 5,570 in Bombay. The imperial service troops, consisting of picked corps from the armies of the feudatory princes, trained under the inspection of 18 British officers, numbered 17,987 men in 1899, consisting of 7,820 cavalry, 9,874 infantry, and 293 artillery. The contingent of Kashmir was 3,168; of Patiala, 1,799; of Alwar, 1,572; of Gwalior, 1,462; of Jodhpur, 1,190; of Bhartpur, 1,085; of Jaipur, 796; of Hyderabad, 786; of Kapurthala, 739; of Nabha, 736; of Bahawalpur, 573; of Jind, 649. Indore, Mysore, Bhopal, Rampur, and the Kathiawar states held small bodies of cavalry, and Bikanir, Maler Kotla, Faridkot, and Sirmur a company or battalion of infantry at the call of the India Government.

The naval force maintained by the Indian Government consists merely of two monitors, of 3,340 and 2,900 tons, armed with 4 14-ton guns, a dispatch boat, 2 torpedo gunboats, 7 small torpedo boats, and a mining flotilla. Bombay, Karachi, Rangoon, Madras, and the Hugli are defended by forts. The guns are said to be obsolete or defective, and black powder only is provided. The field artillery used black powder till 1899, and many of the guns are old muzzle-loaders. The cavalry are still armed with the Martini carbine and the Lee-Metford rifles furnished to the infantry are not of the best type. The native troops have till now been armed with the old Martinis discarded by the British regiments. These are now being passed on to the local militia organized for the defense of the northwest passes as fast as the native regulars can be rearmed with Lee-Metfords.

Commerce and Production.—The survey department furnished returns in 1898 respecting 542,660,615 acres in British India out of 732,792,973 acres in British and native territory covered by the surveys. Of the net area for which returns were made 138,118,424 acres were not available for cultivation, 64,546,530 acres were covered with forests, 106,539,103 acres were waste lands capable of being utilized, 37,159,326 acres were cultivated lands left fallow, and 196,497,232 acres were under crops. Of the area cropped 70,781,408 acres were under rice, 19,946,164 acres under wheat, 92,017,559 acres under other food grains, 2,648,498 acres under sugar cane, 12,564,664 acres under oil seeds, 8,916,

229 acres under cotton, 1,366,513 acres under indigo, 465,593 acres under tea, 1,048,439 acres under tobacco, 2,159,908 acres under jute, 585,421 acres under other fiber plants, 5,750,080 acres under food crops other than grain or pulse, and 151,092 acres under coffee. Counting double 27,245,474 acres on which double crops were raised, the total area cropped was 223,243,566 acres. The irrigated area was 18,016,253 acres, of which 10,245,732 acres were served by minor works, paying Rx 3,799,946 for the service, and 8,370,521 acres by major works, paying Rx 2,072,880, making the gross revenue collected for irrigation Rx 5,872,826. The net profits from irrigation works for which capital accounts are kept were $\frac{7}{10}$ per cent. The area cultivated, counting double for double crops, was 30,418,454 acres, and the value of the irrigated crops was estimated at Rx 45,000,000. The reserved forests cover nearly 76,500 square miles, the area in the Central Provinces being 19,206, in Burmah 14,706, in Madras 13,775, in Bombay 13,281, in Bengal 5,880, in the Northwest Provinces and Oudh 3,851, in Assam 3,590, in the Punjab 2,283, in Berar 4,175 square miles, besides which there are Government forests in Coorg, Ajmere, Baluchistan, and the Andamans.

The value of the sea-borne commerce of India in the financial year 1898-'99 was Rx 89,997,141 for imports and Rx 120,211,145 for exports, a decrease of 4.45 per cent. in the imports and an increase of 14.73 per cent. in the exports compared with 1897-'98. Of the imports, Rx 72,101,528 consisted of merchandise and Rx 17,895,613 of treasure; of the exports, Rx 112,799,725 of merchandise and Rx 7,411,420 of treasure. Of the bullion and specie imported, Rx 8,840,054 represent gold and Rx 9,055,559 silver imports, while the exports of gold were Rx 2,336,646 and of silver Rx 5,074,774. The imports of merchandise, excluding Government stores, were Rx 68,380,341 in value and the imports of treasure not for the Government were Rx 17,883,957, making the total imports on private account Rx 86,264,298. Of the total exports of merchandise Rx 109,350,276 were products of the country and Rx 3,371,197 re-exports. Excluding Government stores and treasure, the imports and exports of the principal commercial divisions of India in the foreign commerce of 1898-'99 were as follow:

DIVISIONS.	Imports.	Exports.
Bengal.....	Rx 27,949,005	Rx 46,718,298
Burmah.....	5,544,298	11,725,267
Madras.....	5,267,291	11,429,118
Bombay.....	25,651,902	41,806,515
Sind.....	3,967,845	8,955,456

The imports of live animals in 1899 were valued at Rx 329,306, and exports at Rx 159,979; imports of articles of food and drink at Rx 9,189,556, and exports at Rx 38,576,728; imports of chemicals, drugs, and colors at Rx 2,013,412, and exports at Rx 11,333,926; imports of oils at Rx 3,552,005, and exports at Rx 800,887; imports of raw materials at Rx 2,971,876, and exports at Rx 39,143,998; imports of hardware and cutlery at Rx 1,430,123, and exports at Rx 15,739; imports of metals at Rx 5,179,246, and exports at Rx 110,896; imports of machinery at Rx 3,055,931, and exports at Rx 882; imports of railroad material and rolling stock at Rx 2,824,815, and exports at Rx 8,832; imports of yarns and textile fabrics at Rx 30,325,847, and exports at Rx 13,945,656; imports of clothing at Rx 1,380,486, and exports at Rx 151,928; imports of all other articles at Rx 6,127,738, and exports at Rx 5,100,825. The value of cotton manufactures imported was Rx 27,229,

720; metals, hardware, and cutlery, Rx 6,009,369; sugar, refined and raw, Rx 4,016,999; silk, raw and manufactured, Rx 2,159,450; liquors, Rx 1,647,520; woolen goods, Rx 1,523,731; provisions, Rx 1,531,667; chemicals and drugs, Rx 1,236,305; spices, Rx 889,054; dyes and tans, Rx 777,107; salt, Rx 661,227; coal, Rx 696,379; glass, Rx 662,293; paper, Rx 382,657; umbrellas, Rx 243,438; grain and pulse, Rx 31,265. The exports of rice were valued at Rx 15,813,954; oil seeds and other seeds, Rx 11,847,194; raw cotton, Rx 11,188,538; wheat, Rx 9,719,688; tea, Rx 8,044,804; cotton manufactures, Rx 7,788,470; hides and skins, Rx 7,449,218; opium, Rx 7,126,009; raw jute, Rx 6,941,245; jute manufactures, Rx 5,798,359; indigo, Rx 2,970,478; coffee, Rx 1,749,824; wool, Rx 1,253,483; timber, Rx 1,085,705; lac, Rx 871,394; oils, Rx 800,887; spices, Rx 618,596; provisions, Rx 609,729; dyes other than indigo, and tans, Rx 510,886; silk, raw, and cocoons, Rx 458,003; salt-peter, Rx 349,344; woolen manufactures, Rx 229,285; sugar, Rx 198,437; silk manufactures, Rx 128,189. Of the rice exported the value of Rx 9,582,038 came from Burmah, Rx 4,698,436 from Bengal, Rx 612,941 from Bombay, Rx 766,230 from Madras, and Rx 144,309 from Sind; of the wheat, Rx 3,399,587 from Bombay, Rx 4,700,047 from Sind, and Rx 1,620,015 from Bengal; of the opium, Rx 4,318,148 from Bengal and Rx 2,807,861 from Bombay; of the indigo, Rx 1,870,553 from Bengal, Rx 934,266 from Madras, and smaller amounts from Bombay and Sind; of the cotton, Rx 8,144,818 from Bombay, Rx 1,305,380 from Madras, Rx 917,859 from Sind, Rx 676,992 from Bengal, and Rx 143,489 from Burmah; of the seeds, Rx 5,864,808 from Bombay, Rx 4,114,756 from Bengal, Rx 1,455,451 from Sind, and Rx 409,028 from Madras. On rice is collected the only export duty, amounting in 1899 to Rx 1,006,651. Of the import duties, amounting to Rx 6,192,940, salt paid Rx 2,588,993. Of the total value of the imports of merchandise Rx 58,087,914, and of the exports Rx 68,011,394, passed through the Suez Canal. The export and import trade of the port of Calcutta was Rx 72,578,339; of Bombay, Rx 60,578,339; of Rangoon, Rx 14,044,212; of Karachi, Rx 12,896,636; of Madras, Rx 8,623,601; of Tuticorin, Rx 2,187,869.

The shares of the principal commercial countries in the foreign commerce of India in 1898-'99 are shown in the following table, giving the total imports and the exports of Indian produce:

COUNTRIES.	Imports.	Exports.
Great Britain.....	Rx 47,082,169	Rx 22,006,018
China.....	1,691,899	12,707,913
Germany.....	1,727,875	8,945,806
France.....	1,081,846	7,815,970
Straits Settlements.....	2,006,210	5,644,409
United States.....	1,962,069	5,854,191
Egypt.....	125,708	6,847,080
Belgium.....	2,250,432	4,742,180
Ceylon.....	702,006	4,307,212
Japan.....	545,006	5,215,587
Austria-Hungary.....	2,428,376	2,067,180
Italy.....	556,927	8,305,053
Mauritius.....	1,969,345	1,271,067
Russia.....	2,052,996	122,724
Arabia.....	443,794	1,297,086
Australia.....	325,708	1,281,956
East Africa.....	265,941	1,142,555
South America.....	364	1,274,555
Persia.....	583,853	705,340
Netherlands.....	352,301	471,782
Spain.....	13,066	155,060

The import and export trade over the land frontiers with Nepal, the Shan States, Kashmir, Kandahar, Cabul, Bajaur, western China, Zimbe, Khelat, Tibet, Siam, Lus Bela, and Karen amounted to Rx 10,142,000 in 1899, the imports be-

valued at Rx 5,501,600 and exports at Rx 4,640,000. The value of the coasting trade, excluding Government stores and treasure, was Rx 68,701,000 for imports and exports. The trade with Afghanistan has fallen away in consequence of restrictions imposed by the Ameer, who has forbidden the export of horses and the import of opium and created Government monopolies of several important articles.

The indigo plantations, the most important of which are in Behar, the most densely populated province of India, are threatened with the competition of artificially produced indigo, which is made in Germany more cheaply than the natural indigo can be grown. The use of chemical substitutes already interfered with the extension of indigo cultivation before German chemists invented the process of manufacturing synthetic indigo on a commercial basis. The planters still hope to be able to compete with the German product by increasing the yield and improving the methods of preparation. The planters applied to the Government for pecuniary aid to help them resuscitate the cultivation of sugar, which was once carried on by Europeans before it turned to indigo, and which might once more become profitable with modern methods and machinery, at least as an auxiliary or alternative.

The food crops of India, except in famine years, are superabundant for the meager requirements of the population, and usually there is a surplus for export. The variability of rain causes great fluctuations from year to year in quantities of the different agricultural products that are exported. Wheat is grown in almost every province, yet the main production is in the northern half, while two thirds of the cotton crop is in the southern half of India, though this is also cultivated everywhere. Rice is produced in Burmah, eastern Bengal, and Madras far in excess of the needs of those provinces. Maize is the staple food in many of the districts of central and southern India lately stricken with famine, and millet is the staff of life for a majority of the population of the empire. Nine tenths of the flax crop is grown in the Northwest Provinces, the Central Provinces, and Bengal. In the failure of rain over a great part of India there was a great deficiency in staple export crops, such as wheat, cotton, and oil seeds, but stocks were maintained for export from the abundant harvest of 1898. The imports for the year ending March 1900, excluding treasure and Government stores, amounted to Rx 70,712,000, exceeding the imports for 1899 and falling but little short of the average for the five years previous. The merchandise exports for private account, although less in 1899, exceeded the average for the quinquennial period ending with 1898, amounting to a total of Rx 105,714,000, not including Rx 1,000,000 of re-exports. The exports of 1899 were maintained by abnormal shipments of rice and wheat, as in 1900 large quantities of food grains were delivered to the famine-stricken provinces. More than 40 per cent. of the total imports consist of cotton manufactures, nearly all of which come from England. The opium exports have increased in the last two years, owing to the adulteration of the Chinese drug and the increased purchasing power of the Chinese people, but it is probable that the downward tendency of opium exports is only temporarily suspended. The increased exports of raw hides and skins, of which there was a heavy mortality among cattle consequent on the famine. The exports of raw cotton to Europe were less than in previous years, while the

Japanese requirements were larger. The area under cotton, jute, and oil seeds was smaller owing to the superior claims of food crops in consequence of the last famine, and short supplies entailed higher prices, which were further enhanced by the crop failures of 1899-1900. The sugar imports from Germany have been replaced by the product of Mauritius, China, Java, and the Straits Settlements as the result of countervailing duties against bounty-fed sugar, and the imports from Austria from the same cause have declined. The imports of metals and metal manufactures declined, especially copper on account of its high price and machinery in consequence of the depression in the manufacturing industries of Bombay. The imports of petroleum, which came from the United States before 1894 and since then from Russia, were smaller in 1900, but still of great magnitude notwithstanding the development of the oil wells of Burmah. The exports of tea rose to 175,000,000 pounds in 1900, having doubled in twelve years. Of the total 90 per cent. went to England, constituting 50 per cent. of the English imports of tea. New plantings have begun to yield, increasing the annual production.

The chief effect of the unparalleled drought of 1900 on the foreign commerce of the financial year 1900 was to stimulate exports and to a certain extent imports. In 1901 there will be little to export of the staple products. The crop of oil seeds, usually worth Rx 27,000,000, failed utterly; the cotton crop, of the average value of Rx 18,000,000, amounted to not more than Rx 7,500,000; the wheat crop, in normal years worth Rx 36,000,000, was reduced to Rx 15,000,000. The loss of nine tenths of the cattle entails diminished production for years to come.

Navigation.—The number of vessels entered during 1898-'99 at the ports of British India was 4,915, of 4,583,186 tons, of which 2,365, of 3,770,391 tons, were British; 775, of 108,641 tons, were British Indian; 1,181, of 66,305 tons, were native; and 594, of 637,849 tons, were foreign. The number cleared was 4,771, of 4,532,460 tons, of which 2,317, of 3,697,915 tons, were British; 762, of 108,062 tons, were British Indian; 1,121, of 66,728 tons, were native; and 571, of 659,755 tons, were foreign. Of the vessels entered 662, of 1,628,559 tons, were steamers that passed through the Suez Canal, and of those cleared 1,004, of 2,341,220 tons. The number of vessels entered with cargoes in the inter-port trade was 100,865, of 11,097,652 tons; cleared, 91,861, of 11,210,614 tons. The number of vessels built in India during 1898-'99 was 67, of 3,409 tons; the number first registered, 105, of 7,668 tons.

Railroads, Posts, and Telegraphs.—The length of railroads in operation in India on March 31, 1899, was 22,491 miles, having increased from 18,500 miles in 1894, 15,242 miles in 1889, and 10,828 miles in 1884. Of the total length 11,078 miles were Government lines operated by companies, 5,566 miles were Government lines operated by the Government, 2,588 miles were lines of guaranteed companies, 1,102 miles were assisted lines, 922 miles were lines belonging to native states worked by companies, 146 miles were lines of the native states worked by the Indian Government, 1,016 miles were lines owned and operated by native states, and 73 miles were foreign lines. The total capital outlay was Rx 297,424,318 at the end of 1898, including unfinished lines and surveys, and of this Rx 174,868,574 was on the state railways, Rx 41,164,344 on state lines leased to companies, Rx 51,272,732 on guaranteed railways, Rx 13,636,605 on the lines of assisted companies, Rx 13,941,746 on the railways of the native states,

Rx 1,758,766 on foreign lines, Rx 486,651 on surveys, and Rx 294,900 on coal mines. The guaranteed companies had raised Rx 46,955,105 of capital and the companies leasing Government railroads Rx 29,491,022. The gross receipts of all the railways during 1898 were Rx 27,464,235, of which Rx 8,689,220 were from passengers and Rx 17,885,888 from freight. The number of passengers carried was 152,584,321; tons of freight, 36,350,900. The operating expenses of all railways was Rx 13,064,353, being 47.57 per cent. of the gross earnings, and the net earnings were Rx 14,399,882, giving a net return on the capital of 5.37 per cent.

The number of letters, postal cards, and money orders that passed through the British Indian post office in the year ending March 31, 1898, was 408,797,236; of newspapers, 31,891,484; of parcels, 2,965,990; of packets, 21,364,415.

The Government telegraph system at the end of the fiscal year 1898 had 50,306 miles of line, with 154,824 miles of wire. The number of private telegrams was 5,713,227 during the year. The receipts were Rx 1,309,330, and expenses Rx 1,051,494.

Currency.—By the act passed on Sept. 15, 1899, on the recommendation of a committee of British financiers appointed by the Secretary of State in London, the legal standard of value in British India is the gold sovereign. The British sovereign is legal tender, the mints have been declared open to the free coinage of gold, and measures are taken by the Government with a view of introducing a gold currency. Since Sept. 11, 1897, sovereigns have been received at the reserve treasuries at the exchange rate of 15 rupees for the sovereign, the rate at which by the act of June 26, 1893, closing the Indian mints to the unrestricted coinage of silver, gold coin of full weight and gold bullion were declared receivable at the two Government mints in Calcutta and Bombay in exchange for rupees and by the Government in payment of dues, and also in exchange for currency notes issued in Calcutta and Bombay. The mints were closed to the free coinage of silver in accordance with the recommendations of a committee, of which the Lord Chancellor was chairman, in consequence of the fall of silver which brought the exchange value of the rupee below $\text{Rs. } 3\text{d.}$, entailing a loss by exchange so serious as to embarrass the Indian Government and render the estimates of expenditure extremely uncertain. Fluctuations continued after the closure of the mints, and the Government withheld remittances to arrest the fall of the market rate, until this gradually approached the ratio fixed by the Government of $\text{Rs. } 4\text{d.}$ for the rupee or 15 rupees for the sovereign. From 1835 to 1893 the legal standard was the silver rupee, and before the ratio of $15\frac{1}{2}$ to 1 between silver and gold began to vary in 1873 the exchange rate of the rupee remained steady at 2s. During the whole period the Indian mints coined Rx 373,774,632 of silver, all rupees excepting Rx 11,863,641 worth of British dollars intended for the Straits Settlements and Hong-Kong. Gold mohurs were coined, but not to an appreciable amount. Since the closing of the mints to free coinage the Government has coined rupees to the amount of Rx 94,595 in 1895, Rx 292,713 in 1896, Rx 573,353 in 1897, Rx 985,692 in 1898, and Rx 698,365 in 1899. The Bombay mint has also struck British dollars for use in China and the silver-paying colonies of the value of Rx 752,445 in 1896, Rx 1,392,230 in 1897, Rx 4,830,083 in 1898, and Rx 4,888,883 in 1899. The Government has issued a paper currency since 1861, the amount of notes in circulation in January, 1899, being Rx 28,203,275, of which Rx 15,670,000 were covered by coin,

silver rupees mainly, gold to the extent of Rx 480,000, and the remainder was covered by Government securities. The metallic reserve changed from silver into gold after the proclamation of the gold standard, so that on May 1, 1900, it consisted of Rx 14,000,000 of gold and Rx 4,500,000 of silver. The Government was obliged to buy silver with a part of the gold, sufficient to coin rupees to the amount of Rx 4,400,000, in order to have a sufficient silver reserve to meet the demands; and to supply a deficiency of silver coin in the country Rx 16,890,000 in rupees were added to the circulation between April 1 and July 1.

Famine.—Agriculture is the chief occupation of the people of India, and it is carried on under conditions that render it peculiarly difficult and precarious. The soil is remarkably fertile in most of the agricultural districts, but the taxes imposed on the cultivator are more severe than in any European country and more rigorously collected than in any Oriental country. In the south-western Punjab and in Sind a system of irrigation canals is maintained as essential to successful agriculture. In the Central Provinces and immediately north of them wells, tanks, reservoirs, and canals have been made and kept up both at public and at private expense to store water against the hour of need. In the narrow coast strip between the Ghats mountains and the Arabian Sea from Bombay southward to the extremity of the peninsula rains never fail, and on the eastern side, in Bengal, Assam, and Burmah, a failure of the autumnal rains is of rare occurrence, though partial or local droughts may occur. In all other parts of India the crops depend on the monsoon, which may be deficient or unequally distributed in any year, and at periods which seem to recur every ten or twelve years may fail entirely over expanses of hundreds of thousands of square miles, and the failure may be repeated in the following year, or may extend over a period of three or four years with good years intervening. Such repeated widespread droughts are the cause of Indian famines. Drought is never universal even in the endangered territory. A surplus of food products in some of the provinces is usually available for the partial but ready relief of the stricken area. The average annual rainfall in India is 41 inches. In 1896 there was a deficiency of 5 inches, and as a result an area of 205,000 square miles with a population of 40,000,000 was affected with famine by May, 1897. Before the disastrous Orissa famine of 1860 India had enjoyed immunity from serious scarcity for many years. Since that year, from causes ascribed variously or collectively to the periodicity of sun spots, to increasing pressure of the population on the land, or to the denudation of forest areas, India has passed through a long series of lean years and a number of famines. Since 1880 14 scarcities have occurred, of which that of Ganjam in 1889 and that of Madras in 1892 were grave, down to the serious calamity of 1897. The famine code first promulgated in 1883 and the local codes devised to suit the conditions of the various provinces were revised in accordance with the recommendations of a commission appointed in 1898. The Government of India as early as 1874 acknowledged its responsibility for the saving of lives, and in the serious famine that began in that year spent Rx 17,953,000 to relieve distress, an unregulated and wasteful expenditure, which taught the lesson that to borrow for direct famine relief was a disastrous financial expedient and that it was necessary to reserve in prosperous years a substantial surplus of income which should be devoted to reducing debt or preventing the increase of debt for productive public works, so that

When famine comes money can be borrowed to the extent of the amount by which debt has been reduced or prevented. Fresh taxes were imposed in 1878 to secure a surplus revenue, known as the famine insurance fund, to the amount of Rx 1,500,000 a year. In 1881 the plan was modified by applying half the annual fund to special works for protection against famine, such as irrigation canals and reservoirs and railroads for the conveyance of supplies in time of scarcity and for the development in normal years of the districts liable to famine. Between 1880 and 1898 the Government spent Rx 7,791,989 on direct famine relief, for which, when occasion demands, the insurance fund is always available; on protective irrigation works, Rx 1,883,071; on protective railroads, Rx 6,550,931; for guaranteed interest on Midland Railroad bonds, Rx 4,438,507, a questionable application of the fund; for reduction or avoidance of debt, Rx 25,991,797. This makes a total of Rx 25,991,797 and an annual average of about Rx 1,530,000. Down to 1896 the average was but Rx 1,176,279, and it was only brought up to the normal figure by the expenditure on relief during the severe famine of 1897 and 1898. The Government diverted the fund, although a part of it is raised by a supplementary tax salt, to the great military defensive works carried out on the northwestern frontier as the result of the Russian war scare. Until the great famine of 1898 the authorities fell into the belief that a crore and a half of rupees was too much to serve every year for famine insurance.

In 1897 the rainfall was generally sufficient to produce fair crops, and in 1898 the rains were copious and harvests of 1899 were consequently abundant. In 1899 the monsoon failed again, this time more completely than in any previous recorded year. The deficiency was 11 inches, 27 per cent. of the average rainfall. The drought came earlier in the year than was ever before known. Well upon provinces not yet fully recovered from the famine of 1896-'97 and upon others where famine was still then unknown. It brought unprecedented mortality among cattle in central and eastern India, impoverishing classes superior to those ordinarily coming to relief works, and rendering the task of recuperation much more arduous because years must elapse before the live stock can be renewed. The autumn and spring harvests failed utterly. In February, 1900, there were 10,000 persons in the relief camps, twice the number relieved at that part of the season of 1897. The scale of wages at first adopted was reduced. The Government would promise only to stave off absolute starvation, not to prevent suffering. The affected areas had an extent of 17,000 square miles, nearly a quarter of the British Empire, and the population affected reached 54,000,000 in May, 1900. The number receiving Government relief in that month was 7,000, compared with 3,811,000 in the corresponding part of 1897. The southwest monsoon, which breaks in June on the Malabar coast and reaches the central parts of India with 100 inches of rain in good years before the end of September, failed from a half to a total failure in 1899, but it was still hoped that the autumnal crops of south-east India might be saved by a good northeast monsoon and in central and upper India by abundant winter rains. The northeast monsoons, however, which break on the eastern coast in November and December, failed to a great extent likewise, injuring or destroying the autumn crops and cutting off the spring harvest in a vastly greater extent of country than that previously affected, and intensifying the distress there also.

The autumn harvest was the worst for many years, and the spring harvest was little more than half a crop for India as a whole. Peasants sold their bullocks worth 60 rupees for a single rupee and great numbers died on their hands for want of fodder, so that it will take twenty years to restock the country with farm animals. In many places no drinking water could be had.

The benevolence of the public of Great Britain and India enabled the Relief Committee in 1897 to supplement the Government expenditure of Rx 7,272,123 by Rx 1,549,901 of private contributions. This charitable fund was spent: (1) in supplying clothing and blankets to the destitute, special food and medical comforts for the aged and infirm and for hospital patients and children, and in adding to the Government dole in the case of respectable persons and secluded women who were driven to accept gratuitous relief; (2) in supporting orphans during and after the famine; (3) in selling grain at a cheap price to such as would not apply for relief and relieving respectable people, especially women, who shrank from the public inquiry inseparable from state relief, also craftsmen and artisans who could not go to the works; (4) in giving relief in districts not officially recognized as affected; and (5) in furnishing seed and implements and giving a fresh start in life to such persons as would otherwise lapse into pauperism. The number of persons in the first category who were relieved by the charitable fund in 1897 was 1,342,802; in the second, 26,957; in the third, 832,949; in the fifth, 1,540,464. Although the need was much greater, the charitable fund raised in Great Britain up to the middle of May, 1900, was only £370,000, little more than half as much as was contributed in 1897. When drought occurs in India, where 80 per cent. of the people are engaged in agriculture, afflicted localities not only suffer from the curtailment of their food supplies, but all means of earning wages cease. It is possible during the worst famine years to supply food, of which there is always a sufficiency in India, and with the improvements made in railroad communications it can be carried into the famine districts. It can not, however, be distributed to the villages when the cattle die, for they are the sole means of transport in rural India. Hence it is necessary to take the people from their villages and gather them into immense famine relief camps, where their wants can be supplied under the supervision of the officials, who are far too few for the work. The labor of the people crowded in these places is utilized, rather for the purpose of keeping them from idleness and pauperism than with an intelligent purpose, though it is chiefly employed on protective works for the prevention of future famines. The European officials carry out the directions of the famine code to ignore caste and social distinctions, but when native officials have charge of the camps their prejudices and weaknesses interfere with the efficient discharge of their duties.

The famine of 1900 embraced most of central and southern India. The northern tier of provinces, including Burmah, Assam, Bengal, the Northwest Provinces and Oudh, the Punjab, and Sind, were generally free from famine, although the crop deficiencies in many districts of this territory make an enormous total. The wheat crop of Bengal was equal to the average of 16,376,000 bushels, but in the Northwest Provinces and Oudh, where the average for nine years has been 52,344,000 bushels, it fell 25 per cent. below this figure, although a third of the land is irrigated, and in the Punjab, where 55 per cent. of the land is irrigated and an average crop of 70,341,000 bushels

of wheat is produced annually, was only 65 per cent. of what was harvested this year. In the Central Provinces, where 18,000,000 bushels of wheat are raised on the average, this and most other crops failed entirely, and in Bombay only a third of the average wheat crop of 19,000,000 bushels was obtained, and other crops show a like deficiency. In Berar the crops were almost a total failure. The relief was divided between Bombay, the Punjab, the Central Provinces, Berar, Ajmere, Rajputana, Central India, the Bombay native states, and Baroda, and later relief works were started in the Central Indian native states, the Northwest Provinces, and the Punjab native states. The true famine area covered over 300,000 square miles, with a population of 40,000,000, while the area of scarcity and distress extended over 150,000 square miles more and affected 25,000,000 or 30,000,000 persons.

Although the provincial authorities had not yet readjusted their local systems in accordance with the suggestions of the commission appointed to digest the experiences of the famine of 1897, the methods of public relief were more promptly and efficaciously applied in 1900 because the machinery was already in working order and the officials were trained in the famine code. Mortality in many of the worst districts, as in the Central Provinces, was kept down to figures only a little above the normal. In some isolated areas, however, where the distress was acute, where destitute immigrants streamed across the boundary from native states, and where cholera and other diseases attacked the frames already emaciated by privation, the death rate was abnormally high, and in some of the native states it was appalling. The appearance of cholera in the famine camps caused a large proportion of the people on the relief works to flee. When the famine reached the acutest stage in June, notwithstanding the flight of numbers to perish of hunger outside and the mortality in the camps from disease, the relief camps contained over 6,500,000 people. The total population affected grew to 95,000,000.

The Indian Government advanced to the native states Rx 503,800 to aid them in combating the famine, besides a loan of Rx 1,000,000 to the state of Hyderabad, and granted Rx 1,228,800 to the provincial governments to loan out to cultivators on easy terms. The provincial authorities had also Rx 64,500 of charitable funds with which to buy seed and cattle to give to the poorest villagers and to provide for their needs until they could harvest a crop. The ravages of the cholera in Bombay and Rajputana, added to the mortality from starvation, literally decimated the population in the hilly tracts, and among the Bhils, who were with difficulty induced to enter or to stay in the relief camps, 40 per cent. of the people are believed to have perished. Although the contributions from the British public were smaller than could have been expected, popular subscriptions from the United States and Germany and from China and the Straits Settlements came as unexpected windfalls to eke out the charitable funds.

When the summer rains came and the famine camps began to diminish it is estimated that 1,000,000 people had died of starvation or had been carried off by cholera, dysentery, the plague, and smallpox as a result of the famine and that 1,000,000 more were so emaciated that they would not have the strength to recover. There were 500,000 orphaned and homeless children, and 90 per cent. of the cattle had perished in the famine districts. The Government fixed the wages on the relief works at 1½ anna, equal to 3 cents, for nine hours of labor in breaking stone, building reser-

voirs, or making roads. Such a low rate made the Government money go further, and avoided a danger of pauperizing the people. The measure adopted for enabling the ryots to replant the ground when the rain came—in parts of western India the first rain in two years save one bright shower—were more complete than after the last or any previous famine. The advances to working cultivators and to those who employ laborers were made without interest for a year, and the money will not be reclaimed at the end of this term. Its recovery entails eviction or hardship. By the end of June the area of scarcity covered 417,000 square miles, with a population of over 100,000,000, of whom 10,000,000 were absolutely destitute, 7,000,000 of them in the famine camps and the rest too proud to accept relief or be dependent on private charity. The famine death rate was 4,000 a day. The expenditure of the Government for relief amounted to Rx 28,800,000. Government relief was administered (1) by giving payment in money or food for work in the great relief camps; (2) by remitting the rent collected from cultivators under the land settlement; (3) by establishing poor houses, hospitals, and kitchens for the sick and debilitated, delicate and nursing women, children and aged people; and (4) by advancing money for the purchase of seed and cattle. The first crops were gathered in the middle of September. The number of persons on the famine works had dwindled to a little over 1,000,000, but 2,500,000 were still receiving gratuitous relief. The monsoon was an unusually good one, and abundant food crops were obtained.

The Plague.—The bubonic plague, endemic in parts of Mesopotamia, in certain Himalayan valleys, and for the last thirty years in the mountain villages of Yunnan, was carried in 1894 down the West river to Canton and Hong-Kong, and from the latter place by sea to Bombay. For five centuries no plague epidemic, except isolated outbreaks, has extended east of Persia until this last one. The disease has reappeared at the accustomed season in Bombay and the other parts of western India where its first ravages were experienced for several successive years, and has come to be regarded by the medical and government authorities as endemic and not to be stamped out, but by sanitation and cleanliness to be kept under control. The area of its visitations has gradually spread into the mountain regions of the north and to the eastward. Calcutta, being a great seaport, was liable to an outbreak at any time, more so than the ports of Asia, Africa, and Europe into which the disease has been introduced. The Government endeavored to guard against it by cleaning the slums, but at the approach of the wet season in 1899 the plague appeared. The preparations to hold it in check and to prevent it from spreading into the country were a much completer than they were at Bombay as forethought and experience could dictate, and for a time they seemed to be effective. Before the winter ended the infection passed the barriers and invaded Patna and other districts of Behar, which still confined to two wards in Calcutta, where the Government promptly disinfected every house that was attacked. In March the mortality rose in Bengal to nearly 5,000 a week, exceeding that of all the rest of India. Two fifths of the deaths were in Patna, less than a sixth in Calcutta. The precautions taken in Patna having provoked the people to tumult, the Government gave way to their wishes by intrusting the duty of detecting and reporting imported cases to their leading men whose systematic concealment of such cases was responsible for the great mortality. A commission

appointed in November, 1898, to study the plague and modes of prevention or cure reported favorably on the system of preventive and curative inoculation developed by M. Haffkine.

The Native Princes.—The new press laws and other regulations repressing the free expression of opinion in India have prevented any manifestations of unrest and dissatisfaction such as formerly were common from reaching the outside world during the last and worst of Indian famines. Even the officers of the civil service have been fettered by a rule forbidding them to utter any criticisms upon the policy or conduct of their superiors. When the English colonies began to send contingents of volunteers to fight in South Africa some of the native princes offered their troops also, calling forth praises from the Indian and British governments. In August, 1900, Lord Curzon issued a circular forbidding any of the native chiefs to travel abroad without the permission, not only of the provincial authorities, but of the Government of India. This spoiled the effect of the previous eulogiums on their loyalty, although the reason was given that the attractions of European life and pleasures had a tendency to make them forgetful and neglectful of the welfare of their people.

INDIANA, a Western State, admitted to the Union Dec. 11, 1816; area, 36,350 square miles. The population, according to each decennial census since admission, was 147,178 in 1820; 343,031 in 1830; 685,866 in 1840; 988,416 in 1850; 1,350,428 in 1860; 1,680,637 in 1870; 1,978,301 in 1880; 2,192,404 in 1890; and 2,516,462 in 1900. Capital, Indianapolis.

Government.—The following were the State officers in 1900: Governor, James A. Mount; Lieutenant Governor, W. S. Haggard; Secretary of State, Union B. Hunt; Treasurer, Leopold Levy; Auditor, William H. Hart; Attorney-General, William L. Taylor; Superintendent of Instruction, F. L. Jones; Adjutant General, J. K. Gore; Statistician, John B. Conner; Geologist, Willis S. Blatchley; Commissioner of Insurance, C. W. Neal; Commissioner of Public Lands, L. G. Rothschild; President State Board of Agriculture, Aaron Jones; Labor Commission, B. F. Schmid, L. McCormack; Factory Inspector, D. F. McAbee; Secretary of State Board of Charities, Amos W. Butler; Fish and Game Commissioner, Z. T. McSweeney; Tax Commissioners, T. B. Buskirk, J. C. Wingate; Supervisor of Natural Gas, J. C. Leach; Mine Inspector, Robert Fisher; Chief Justice of the Supreme Court, John V. Hadley; Associate Justices, James H. Jordan, Alexander Dowling, Leander J. Monks, Francis E. Baker; Clerk, Robert A. Brown—all Republicans.

The Governor's term is four years, his election taking place in the year of the presidential election. Other State offices are held for two years, the elections in even-numbered years. The Legislature meets biennially, in January of odd-numbered years, and consists of 50 Senators and 100 Representatives.

Population.—The population of the State, by counties, according to the census of 1900, was as follows: Adams, 22,232; Allen, 77,270; Bartholomew, 24,594; Benton, 13,123; Blackford, 17,213; Boone, 26,321; Brown, 9,727; Carroll, 19,953; Cass, 34,545; Clark, 31,835; Clay, 34,285; Clinton, 28,202; Crawford, 13,476; Daviess, 29,914; Dearborn, 22,194; Decatur, 19,518; De Kalb, 25,711; Delaware, 49,624; Dubois, 20,357; Elkhart, 45,052; Fayette, 13,495; Floyd, 30,118; Fountain, 21,446; Franklin, 16,388; Fulton, 17,453; Gibson, 30,099; Grant, 54,693; Greene, 28,530; Hamilton, 29,914; Hancock, 19,189; Harrison, 21,702; Hendricks, 21,292;

Henry, 25,088; Howard, 28,575; Huntington, 28,901; Jackson, 26,633; Jasper, 14,292; Jay, 26,818; Jefferson, 22,913; Jennings, 15,757; Johnson, 20,223; Knox, 32,746; Kosciusko, 29,109; Lagrange, 15,284; Lake, 37,892; Laporte, 38,386; Lawrence, 25,729; Madison, 70,470; Marion, 197,227; Marshall, 25,119; Martin, 14,711; Miami, 28,344; Monroe, 20,873; Montgomery, 29,388; Morgan, 20,457; Newton, 10,448; Noble, 23,533; Ohio, 4,724; Orange, 16,854; Owen, 15,149; Parke, 23,000; Perry, 18,778; Pike, 20,486; Porter, 19,175; Posey, 22,333; Pulaski, 14,033; Putnam, 21,478; Randolph, 28,653; Ripley, 19,881; Rush, 20,148; St Joseph, 58,881; Scott, 8,307; Shelby, 26,491; Spencer, 22,407; Starke, 10,431; Steuben, 15,219; Sullivan, 26,005; Switzerland, 11,840; Tippecanoe, 38,659; Tipton, 19,116; Union, 6,748; Vanderburg, 71,769; Vermilion, 12,252; Vigo, 62,035; Wabash, 28,235; Warren, 11,371; Warrick, 22,329; Washington, 19,409; Wayne, 38,970; Wells, 23,449; White, 19,138; Whitley, 17,328; total, 2,516,462.

Finances.—The report of the Auditor for the year ending Oct. 31 gives the following information: "The public debt has been reduced during the fiscal year of 1899 \$483,000, and for the two years since the Legislature last met \$896,000. The amount of the State debt Oct. 31, 1900, was \$4,704,615.12. Of this amount a substantial payment can be made Jan. 1, 1901, from the December settlement with the counties on account of the State debt sinking fund tax. The State gave notice many years ago of its desire to pay the State stock certificates now amounting to \$5,615.12, and since then interest has been stopped. The \$340,000 due Purdue University is payable April 1, 1901, and can be paid at maturity. The 3-per-cent. refunders of 1889, now amounting to \$3,130,000, are held mostly by savings banks, and the State can pay at its convenience. The State debt sinking fund of 3 cents on each hundred dollars levied for this purpose will amount in round numbers to \$400,000 a year, and this, with the probable excess each year from the general fund, will practically pay off all the State debt that can be paid within the next four years. The tax duplicate of the State amounts to \$1,335,746.698. The taxes from the duplicate amount to \$21,659,295.81.

"In 1899 there was paid on the claim of the State for equipment of soldiers for the Spanish war \$44,382.50.

"The unusual specific appropriations of the Legislature of 1899, the largest in the history of the State, have been paid so far as due, and the entire amount will be readily met as it matures from the general fund, and in 1899 a surplus of \$83,000 was applied from this fund in the payment of the State debt."

Education.—The school enumeration for 1900 was 756,004, of whom 15,076 were colored; the enrollment in 1899 was 556,651; the average daily attendance, 424,725. The value of school property is \$23,244,600. In the school year 1899-1900 233 school buildings were erected, at a cost of \$846,800. The number of institutes held was 6,892, and the amount paid teachers for attending institutes was \$134,350.88. School trustees were paid for managing educational work, etc., \$74,374.

It is reported that the State truant law which has been enforced the past year has brought 9,000 more children into the schools. The board has employed 106 officers.

The State Normal School, at Terre Haute, opened in September with an enrollment of 400. The summer term closed Aug. 9, 538 teachers having been in attendance. In the year 1,405 teachers attended and 86 were graduated.

Rose Polytechnic Institute graduated 15 stu-

dents at its sixteenth commencement in June, and 13 were graduated at the Veterinary College in April. At the Indianapolis College of Law 17 students were graduated this summer.

At the commencement exercises of the State University, June 20, there were 98 candidates for the bachelor of arts degree, 33 for that of bachelor of law, and 12 for the master's degree.

De Pauw University graduated 72 students at its sixty-first commencement, June 14.

The twenty-sixth commencement of Purdue University was held June 6, when 71 students received diplomas. In the winter the class in agriculture was the largest ever attending, the enrollment being 92, of whom 20 were women.

Wabash College celebrated the sixty-eighth anniversary of its founding, Nov. 21.

Charities and Corrections.—Statistics given in September concerning the charitable and penal institutions of the State for the nine months ending July 31, 1900, show that \$423,434.18 has been expended in maintaining the 4 insane hospitals. The Central Hospital, in Indianapolis, consumed about \$200,000, while the others used about \$70,000 each. About \$215,000 was expended in addition for new buildings and repairs.

The Home for Soldiers, at Lafayette, expended \$63,797.72 for its support; the Soldiers' and Sailors' Orphans' Home, at Knightstown, \$71,869.11; Deaf Institute, at Indianapolis, \$24,177.50; Feeble-minded Institute, Fort Wayne, \$86,810.20. New buildings and unusual repairs in these several institutions cost \$20,885.66.

The State Prison, at Michigan City, required \$84,369.61 for its regular expenses during the nine months referred to; the Reformatory, at Jeffersonville, \$101,601.22; Industrial School for Girls and Women's Prison, Indianapolis, \$31,678.57; Reform School for Boys, Plainfield, \$47,800.95. New buildings and extraordinary repairs consumed \$106,575.53 additional. The aggregate cost of maintaining the State's penal institutions for the nine months was \$265,450.35.

The State treasury received from these institutions, in the way of earnings and receipts, \$97,922.01, reducing the cost to \$1,232,908.78.

The National Home for Disabled Volunteer Soldiers, at Marion, had 1,600 inmates in September, and about 700 members out on furlough. The appropriation for the coming year is \$282,500, of which \$20,000 is for buildings.

Banks.—The total resources of the 96 State banks, July 31, as shown by reports at the Auditor's office, were \$22,576,934.42. The call in May showed the total resources of the banks to have been \$23,178,919.84. The individual deposits were less in July than they were in May, and it is shown that there has been an increase in the amount of United States bonds held.

Railroads.—In 1899 77 miles of road were built in the State, and in the first half of 1900 there were 34. The Tax Board increased the valuation of railroads for taxation, making the total \$154,473,491, an increase of \$951,600. Other companies were rated as follow: Telephone, \$3,420,159; telegraph, \$2,610,742; express, \$1,822,840; palace car, \$432,598.

The State sued the Vandalia Railroad for more than \$2,000,000, alleged to be due under the charter under which the Indianapolis and Terre Haute Railroad first operated. It provided that after the stockholders had been reimbursed for the full sum invested, with 10 per cent. per annum, all over a dividend of 15 per cent. per annum should be turned over to the State for the school fund. The company operated fourteen years under this charter, and then reorganized under the general rail-

road law, which did not contain the provisions of the charter. The Legislature of 1897, after twenty-five years of various attempts to include these provisions in a law, passed such a bill, and the Attorney-General immediately brought suit. In the Superior Court a decision was rendered in October in favor of the State for \$745,154.65.

Products and Business.—The annual report of the State Geologist shows that while Indiana ranks thirty-fourth in area among the States, it ranks sixth in the production of coal, fourth in petroleum, second in natural gas, seventh in building stone, and sixth in value of clay products. The values of these resources are: Petroleum, \$2,228,276; coal, \$5,177,044; natural gas, \$5,060,969; stone, \$1,731,914; and clay, \$3,211,512; making a total of \$17,409,715. The production of petroleum for 1899 was 3,818,713 barrels, an increase over 1898 of 67,406 barrels. On Jan. 1, 1900, there were 4,336 producing wells in the State, against 3,628 on the same date the previous year. The wells sunk number 6,978, so that the number of dry wells in the State is 2,642.

Natural gas occurs in an area approximating 2,800 square miles. The average pressure in 1890 was 325 pounds, but it has decreased to 155 pounds, and as the supply is shut off at 130 pounds the outlook is not bright.

In the past year 5,865,123 tons of coal were mined. It is estimated that the coal in the State will last three hundred years.

The output of stone was valued at \$1,686,572.

It was reported in August that the wheat crop in much of the State was a disastrous failure, owing in part to weather conditions, but largely to the depredations of the Hessian fly.

Experiments appear to have shown that only the northern part of the State is adapted to the cultivation of sugar beets, and the officials at the experiment station have announced that no special attention will hereafter be given to the subject.

The Legislature passed a law for protecting Asiatic or Chinese pheasants, imposing a fine of \$50 for killing one, and 52 pairs have recently been distributed through the State.

The business failures for the first six months of the year were reported as 57, against 155 in the corresponding part of 1896.

Reports of mortgages filed and those satisfied show that in the 92 counties the total of those filed in 1899 was about \$10,000,000 less than in 1898.

Labor.—About 8,500 coal miners of the State stopped work April 1 because the wage-scale year came to an end with no agreement reached on the powder provision in the contract for the ensuing year, the operators wishing to bind the miners to buy powder from them at \$1.75 a keg, while the miners wanted the privilege of buying in the open market. An agreement was reached April 13, the right to buy in the open market being conceded on the understanding that operators were not to be held responsible for fluctuations in the price. In November more than 200 hoisting engineers and 7,000 miners went out on account of the refusal of operators to sign with the engineers for a higher scale of wages. There were strikes in the year of glass cutters and workmen of other trades, with the result of advanced wages in many instances. The annual report of the Labor Commissioner in September showed that there had been 28 strikes, of which 19 were successful. In 14 increased wages had been demanded and secured.

A decision was rendered in the Superior Court in May, upholding the constitutionality of the law requiring weekly payment of wages.

Historical.—A meeting was held at the State-house, July 4, in observance of the one hundredth anniversary of the establishment of Territorial government in Indiana. Gov. Mount presided, and papers were read by Amos Hanway, Ignatius Gwynn, and Calvin Fletcher. Other papers on the history of the State, which for lack of time were not read, were prepared by D. M. Bradbury, A. Goodwin, C. T. Dalton, J. R. Wilson, W. H. Smith, Miss Lydia Blaich, W. N. Jackson, G. U.ingham, W. W. Woollen, and S. N. Chambers. A commission has been formed to raise \$25,000 as a monument to the memory of Gen. Henry W. Horton, who was a citizen of the State.

Requisitions on the Governor.—In April the Governor issued a requisition for a prisoner in the Kentucky Penitentiary, which was honored by Gov. Taylor; but the prison officials, not recognizing him as Governor, declined to obey the order, and the officer serving the requisition went to Mr. Beckham, who offered to honor the requisition if Gov. Mount would agree to honor any requisition from him. This the Governor declined to do; regarding Mr. Beckham as a contestant until the final decision of the courts, and, moreover, holding such a compact unlawful even were there no question of Mr. Beckham's title. Later, requisitions were made on Gov. Mount for the surrender of Charles Finley and ex-Gov. Taylor, accused of complicity in the murder of Senator Goebel, but they were refused on the ground that in the existing state of feeling in Kentucky a fair trial would be impossible.

Lawlessness.—A dispatch from Rockport, Dec. 1, says that two negroes who waylaid, brutally murdered, and robbed a white barber in the morning were lynched in the jail yard at night by a mob of 1,000 citizens. The next day a third negro accused in the murder was taken from a cell at Booneville and hanged by a mob. Militia ordered from Evansville by the Governor arrived at Booneville fifteen minutes after the hanging.

Burn.—A special election was held in this county, March 26, to determine whether it should continue under town or city government. The result showed a majority of 150 for the change to city government.

Political.—State officers were elected Nov. 6. The tickets were in the field—Republican, Democratic, Prohibition, Populist, Social Democratic, Socialist-Labor, and Union Reform.

A Populist convention was held at Indianapolis, Feb. 22. The resolutions reaffirmed the principles of the party on national issues, and on local matters said: "Resolved, That we view with alarm the enormous increase in the assessed values of the property for the purpose of taxation and the increased rate of taxation in Indiana, and we demand more rigid economy in the management of the State, county, and municipal affairs; that we demand a State law compelling the letting of all public works and advertisements to the lowest bidder; that we demand the election of the county superintendents by the vote of the people; that we demand a stricter enforcement of the State factory and eight-day laws; that the People's party of Indiana, believing that no man can rightfully govern another without the consent of the governed, favors self-government for the Philippines."

G. Burkhardt was nominated for Governor, Messrs. C. M. Walter, W. T. Carmichael, J. W. Jones, W. H. Kunse, G. F. Boyer, C. E. Hoffman, J. P. Beasley, A. L. D. Grindle, Silas M. Holcomb, and J. H. Smith. Bull was the candidate for the offices of Lieutenant Governor, Secretary, Auditor, Treasurer, Attorney-General, Reporter of the Supreme Court, Superintendent of Instruction, Chief of the

Bureau of Statistics, and judges of the Supreme Court, respectively.

The Republican convention met at Indianapolis, April 25. The resolutions approved the policy of the national administration on every issue, and favored the Nicaragua Canal, just and liberal pensions, restricted immigration, and legal control of trusts. On State affairs, they approved the administration, especially commending the management of the finances in the reduction of the debt and of the State levy; the "emancipation of the penal and benevolent institutions from partisan control and the provision, through ample appropriation by the last Legislature, for new buildings and appropriate maintenance to accommodate the unfortunate wards of the State—many of whom have been compelled to be quartered in county almshouses"; the establishment of a labor commission; the passage of the mortgage exemption law; and "the fulfillment of the pledge of the Republican party for reform in county and township government, whereby in the first year of the operation of the reform laws over \$1,000,000 will be saved to the taxpayers of the State." The Governor's treatment of unemployed miners was praised, the soldiers of the State were commended, and an adequate primary election law was promised. The ticket follows: For Governor, Winfield T. Durbin; Lieutenant Governor, Newton W. Gilbert; Secretary of State, Union B. Hunt; Auditor, William H. Hart; Treasurer, Leopold Levy; Attorney-General, William L. Taylor; Reporter of the Supreme Court, Charles F. Remy; State Statistician, Benjamin F. Johnson; Superintendent of Public Instruction, Frank L. Jones; Judge of the Supreme Court, First District, James H. Jordan; Judge of the Supreme Court, Fourth District, Leander J. Monks.

At Indianapolis, May 2, the Prohibitionists charged the President with "moral cowardice in refusing to exercise his authority as commander in chief of the army to abolish the sale of liquor in the army canteen, and to prohibit its importation into our newly acquired territory." The following ticket was nominated: For Governor, Charles N. Eckhart; Lieutenant Governor, Rev. Robert H. Clark; Secretary of State, Dr. R. E. Pretlow; Auditor, Rev. M. B. McKinsey; Treasurer, Edwin Hiatt; Attorney-General, Mahlon H. Krauss; Reporter of Supreme Court, Isaac S. Wade; State Statistician, Henry S. Bonsib; Superintendent of Public Instruction, B. W. Ayres; Judge of Supreme Court, First District, C. B. Kessinger; Judge of Supreme Court, Fourth District, James E. Graham.

The Democrats, in State convention at the capital, June 6, declared allegiance to the Chicago platform, instructed delegates for Mr. Bryan, censured the administration policy in the new possessions, demanded repeal of the stamp tax, declared for the election of United States Senators by direct vote of the people, opposed a large standing army, extended sympathy to the Boer republics, demanded the strict enforcement of the Monroe doctrine and the construction of the Nicaragua Canal, and denounced the Hay-Pauncefote treaty as an abject surrender to England; denounced the Dingley tariff law and declared opposition to the protective tariff, saying trusts spring from the tariff, and declaring that the Republican administration has made no effort to abolish them.

On State matters the platform called attention "to the reform legislation which the Democratic party has given the people of this State, the school-book law, the tax laws, the Australian ballot, the fee and salary reform, and the many statutes for the protection of labor," and said further:

"The Republican party is now hypocritically claiming credit for the reduction in our State debt, made possible by the Democratic tax law, the enactment of which it opposed. It has mutilated the Australian ballot and repealed the statute making the bribery of voters a penal offense."

The Democratic candidates were: For Governor, John W. Kern; Lieutenant Governor, John C. Lawler; Secretary of State, Adam Heimberger; Auditor, John W. Minor; Treasurer, Jerome Herff; Attorney-General, C. P. Drummond; Reporter of Supreme Court, H. G. Yergin; Superintendent of Public Instruction, Charles Greathouse; Chief of Bureau of Statistics, Edward Horuff; Judge of Supreme Court, First District, George L. Reinhardt; Judge of Supreme Court, Fourth District, J. W. Adair.

The Social Democratic party nominated in July the following: For Governor, John W. Kelly; Lieutenant Governor, John A. Lloyd; Secretary of State, Edward H. Evinger; Auditor of State, William Croke; Treasurer of State, C. A. Hulaman; Attorney-General, C. A. Thornton; Reporter of the Supreme Court, Mr. Feasier; State Statistician, William Ehrenhart; Superintendent of Public Instruction, M. A. Thorndyke.

The Socialist-Labor party nominated for Governor, Lieutenant Governor, Secretary of State, Auditor, Treasurer, Attorney-General, Superintendent of Instruction, and Chief of Bureau of Statistics, respectively, Messrs. Moore, Dryer, Byram, Soules, Fritz, Youngman, Stoner, and Singer.

The candidates of the Union Reform party were Messrs. Wilson, Perry, Wheeler, Withrow, Carter, and Coppock for the offices, respectively, of Governor, Lieutenant Governor, Secretary, Auditor, Superintendent of Instruction, and Chief of the Bureau of Statistics.

The official report of the vote for presidential electors stands: Republican, 336,063; Democratic, 309,584; Prohibitionist, 13,718; People's party, 1,438; Socialist-Labor, 633; Social Democratic, 2,734; Union Reform, 254.

The Republican State ticket received a majority, the vote on Governor standing: Durbin (Republican), 331,531; Kern (Democrat), 306,272; Eckhart (Prohibitionist), 13,453; Burkhart (People's party), 1,504; Moore (Socialist-Labor), 644; Kelly (Social Democrat), 2,239; Wilson (Union Reform), 244.

The Republicans elected 19 of the 26 Senators chosen, and the Democrats 7. Of the 24 holding over, 14 are Republican. The House will have about 61 Republicans to 39 Democrats.

The two constitutional amendments voted upon received each a majority. They fix the number of justices of the Supreme Court at 5 to 11, instead of, as now, 3 to 5, and authorize the Legislature to prescribe qualifications for admission to the bar. The total vote for the first amendment was 314,710, and the total vote against it was 178,960—a majority for the amendment of 135,750. The vote for the second amendment was 240,031, and the vote against it 144,072—a majority for the second amendment of 95,959.

IOWA, a Western State, admitted to the Union Dec. 28, 1846; area, 56,025 square miles. The population, according to each decennial census since admission, was 192,214 in 1850; 674,193 in 1860; 1,194,020 in 1870; 1,624,615 in 1880; 1,911,896 in 1890; 2,251,829 in 1900. This is an increase of 15.9 per cent. in the past ten years. Capital, Des Moines.

Government.—The following were the State officers during the year: Governor, Leslie M. Shaw; Lieutenant Governor, J. C. Milliman; Secretary of State, George L. Dobson; Treasurer, John

Herriott; Auditor, Frank F. Merriam; Attorney-General, Milton Remley; Superintendent of Instruction, R. C. Barrett; Adjutant General, M. H. Byers; Railroad Commissioners, E. A. Dawson, Welcome Mowry, David J. Palmer; Labor Commissioner, W. E. O'Brien; Librarian, Johnson Brigham; Board of Control for State Institutions, William Larrabee, L. G. Kinne, John Cownie; Fish Commissioner, George E. Delevan; Chief Justice of the Supreme Court, G. S. Robinson; Associate Justices, Scott M. Ladd, C. S. Granger, Josiah Given, C. M. Waterman, H. E. Deemer; Clerk, C. T. Jones—all Republicans. The incoming government is: Governor, Leslie M. Shaw; Lieutenant Governor, J. C. Milliman; Secretary of State, W. B. Martin; Treasurer, G. S. Gilbertson; Auditor, Frank F. Merriam; Attorney-General, C. W. Mullan; Judge of Supreme Court, Emlin McClain; Railroad Commissioner, D. J. Palmer—all Republicans.

Gov. Shaw, in April, appointed as Library Commissioners Capt. W. F. Johnston, Mrs. D. W. Norris, Mrs. H. M. Tower, Miss Jessie B. Waite. On the death of United States Senator John Henry Gear, the Governor appointed Hon. J. P. Dolliver, junior Senator, to the vacancy.

Finances.—Iowa property has increased in value about \$56,000,000. The growth is mainly in personal property and buildings. This increases the taxable value to \$542,000,000. No new assessment of real estate has been made this year. Live stock increased in value \$43,000,000, at actual values.

The following is a statement of the estimated available revenue for the biennial fiscal period ending June 30, 1901, under existing statutes: Net treasury cash balance July 1, 1899, \$414,294. Proceeds of the State levy—3.2 mills last half of 1899, \$763,435; 2.9 mills 1900, \$1,500,000; 2.5 mills first half of 1901, \$750,000; interest on taxes, \$20,000; total, \$3,033,435. Special levies—charitable institutions, \$770,500; United States aid to Soldiers' Home, \$100,000; receipts from institutions under Board of Control, \$84,000; collateral inheritance tax, \$100,000; corporation taxes, \$405,000; fees of State officers, \$223,500; miscellaneous receipts, \$8,500. Grand total for biennial fiscal period, \$5,139,229.

Banks.—The bank deposits have doubled since June, 1896, exclusive of the national banks, which are equally prosperous. The amount due depositors in 1900 was \$91,147,056.88; the capital stock, \$18,054,900; the liabilities, \$114,392,424.

Railroads.—Iowa, according to the statistics of the Railway Age, compiled in November, 1900, is the fourth State in the Union in railway mileage. More than 3,500 miles are in operation, and 1,500 are in course of construction. The total railroad assessment is \$46,085,119, an increase of about \$1,500,000. The Illinois Central has also put in operation this year 131 miles of new road in the State.

Insurance.—Fees to the amount of \$343,561.15 and taxes amounting to \$1,191,069 have been collected since 1890. This includes all insurance concerns. Iowa people had \$551,671,540 in insurance Jan. 1, 1900. On Jan. 1, 1900, there were in force in Iowa fire insurance policies amounting to \$551,671,540, or equivalent to a larger sum than all the property of the State is assessed for.

The number of companies transacting other than life insurance business in Iowa are as follows: Fire insurance, 132; fidelity insurance, 9; employers' liability insurance, 6; plate glass insurance, 4; hail insurance, 4; steam boiler insurance, 1; accident insurance, 2; burglary insurance, 3.

The 132 fire insurance companies mentioned may be classified as follow: Iowa joint stock companies, 9; Iowa mutual companies, 8; non-Iowa joint stock companies, 81; non-Iowa mutual companies, 1; United States branches foreign companies, 33.

Education.—In his message to the Legislature in January, 1900, Gov. Shaw says: "A system which results in the graduation of 1,839 young men from the high schools of Iowa the current year, and only 954 young gentlemen, is weak at a vital point. Our girls should be educated, but that does not imply that our boys should not be; and a policy that retires the latter from school at fourteen or fifteen years of age needs amendment. So long as a majority of the teachers in town and city schools are women and girls, so long will a majority of the graduates be of the same sex. "In several counties of the State the experiment has been tried of maintaining a central township graded school, to and from which the pupils are conveyed in carriages, at public expense. Whenever this plan has been adopted the results have been most satisfactory. The enrollment has thereby invariably increased, and the attendance has been more regular; better teachers have been employed, with correspondingly improved scholarship, and in addition the expenses have been very considerably reduced.

"Of normal schools," he says, "Iowa possesses no such institution under State control and management. This has facilities to reasonably accommodate 600 pupils. During the last year the attendance has averaged over 1,000."

The Legislature provided for one new normal college, and made the following appropriations: State University, \$110,000; State Agricultural College, \$167,000; State Normal School, \$164,800; total, \$441,800.

The Memorial Military College of the Sons of Veterans is to be built at Mason City, and \$2,000,000 have been raised for it. Mason City gave the site and \$100,000. It is to be a memorial to soldiers and sailors, and is to be supported by donations.

Charities and Correction.—For the year ended July 1, 1900, the 14 institutions under the management of the State Board of Control cost the people of the State \$1,146,733.41. Gov. Shaw, in his message to the Legislature, said: "The twenty-seventh General Assembly made provision for a board of control, which for nearly two years has had the management of all our State institutions, excepting those purely educational. The policy thus inaugurated has resulted in a very considerable saving to the State, and in addition the service at most of the institutions, I am persuaded, has been improved. The several institutions under the control of the board have in the aggregate 4,189 acres of land, valued at \$300,849. The buildings thereon are valued at \$7,482,735, and the personal property \$597,134.77, making a total of \$8,380,718.77. There were being cared for at these institutions, June 30, 1899, 6,980 persons. There was expended during the period for the support of inmates, \$1,114,619.75; for improvement to buildings and grounds, \$452,653.80."

The Legislature made the following appropriations for State institutions: Cherokee, \$360,000; Clarinda, \$23,300; Mount Pleasant, \$75,600; Independence, \$19,300; Fort Madison, \$14,400; Anamosa, \$58,241; Eldora, \$37,400; Mitchellville, \$21,000; Vinton, \$6,500; Council Bluffs, \$6,000; Glenwood, \$64,534; Davenport, \$44,600; Marshalltown, \$8,000; total, \$764,175.

Products.—The fall report upon agriculture showed that the year had yielded the most valu-

able crop of staple cereals ever grown in the State. The corn estimate was 353,365,000 bushels, capable of giving \$50 to every person in the State. The State Fair was the largest and most successful ever held. The State has \$7,022 worth of Angora goats.

Six hundred farmers tried an experiment in co-operative farming at Rockwell. They say: "Our people were not students of co-operative philosophy. We have barred from all our proceedings as co-operatives religion, politics, and racial differences. As co-operatives we are only farmers assuming the part of business men, and we find that we can be as successful as business men as those who are only that and not farmers. Where we were once opposed we are now supported. One of the cardinal doctrines of the association is that the middleman is always an instrument of injustice for the buyer as well as the seller, and the main idea in their organization was to get rid of the middleman."

Legislative Session.—The Legislature convened on Jan. 8. The following are the more important of the 200 bills that were passed:

For assessment and taxation of telephone and telegraph companies, applying to these companies the system now in force for assessment and taxation of railroad property.

A special tax levy of one tenth of a mill, not exceeding \$55,000 a year for five years, for the State University for building.

Levy of a tax of one tenth of a mill, not to exceed \$55,000 a year for five years, for the State Agricultural College for building.

Exempting beet-sugar plants from taxation for ten years.

Requiring the Executive Council to fix a levy that will raise \$1,400,000 next year and \$1,500,000 for the next year.

Changing the use of blasphemous and obscene language from an indictable felony to a misdemeanor.

To prohibit gambling in cities.

Making train robbery or attempted train robbery punishable by life imprisonment or any term from ten years up.

Prohibiting the operation of plants that use gasoline for cleaning in tenements.

Prohibiting the soliciting of liquor orders by traveling salesmen.

Making it a misdemeanor to desecrate or deface the United States flag in any way, as by an advertisement.

Requiring the retention of 5 to 15 cents per pupil in township and rural school districts, to be expended in buying a library. This establishes the rural school library in Iowa.

Creating a library commission to promote the establishment and efficiency of free public libraries.

Authorizing the State library trustees to extend the traveling library department.

Authorizing all cities and towns to levy taxes for library purposes.

Establishing a reformatory for women at Anamosa. The bill appropriates \$2,500.

Placing the county asylums and private asylums under the supervision of the State Board of Control.

Providing for compensation of members of the National Guard for drilling, fixing the pay at 10 cents an hour, not to exceed 20 cents a week.

Appropriating \$50,000 for Iowa monuments at the battlefield of Shiloh.

Placing the county and private insane asylums of the State under the charge of the Board of Control.

Reorganizing the National Guard, placing it on

an army basis and footing so that in time of war it can be sent into the service without reorganization at that time.

Authorizing and directing the authorities of the State educational institutions to suspend students who drink or frequent saloons.

Prohibiting the manufacture of pearl buttons and butter tubs in the State penitentiaries.

Creating a department of agriculture.

Requiring the State Board of Educational Examiners to examine all persons to whom State certificates and diplomas are issued. This law removes the complaint of discrimination in favor of the graduates of the State University and the State Normal School.

Empowering the State Board of Educational Examiners to issue certificates to teachers of special branches, as music, penmanship, etc., on the passing of a satisfactory examination.

Increasing the amount that may be paid in rural districts for transporting pupils to and from the public schools from \$5 to \$10 a pupil a year.

Providing for the experimental use of voting machines.

A proposition to amend the Constitution so as to provide for biennial instead of annual elections.

Prohibiting prize fights.

A proposition to amend the Constitution so as to establish woman suffrage was defeated in the House, March 8, by a vote of 54 to 44. It also failed to pass the Senate, where it received 24 votes.

Political.—The People's party held its State convention at Des Moines, April 24, to choose delegates to the national convention. Eugene V. Debs was the choice for presidential nominee.

The Weaver faction of the People's party met in convention at Des Moines, April 17, and the delegates were instructed to vote for the nomination of William J. Bryan. The resolutions condemned the war in the Philippines, favored an income tax, denounced the currency bill, favored initiative and referendum, expressed sympathy with the Boers of the Transvaal, and denounced trusts.

The United Christian party held a State convention on July 4, six members being present. A State ticket was nominated, and a platform was adopted which declared that all temporal governments derive their just powers from God through Christ, and by the consent of the governed; denounced all war; demanded abolition of the liquor traffic, woman suffrage, election of President by direct popular vote, and Government ownership of public utilities. They approved the nomination of Charles M. Sheldon for President of the United States.

The Republican State Convention met in Des Moines, July 30. The following ticket was nominated:

Secretary of State, W. B. Martin; Auditor, Frank F. Merriam; Treasurer, G. S. Gilbertson; Attorney-General, C. W. Mullan; Judge of Supreme Court, Emlin McClain; Railroad Commissioner, David J. Palmer.

The Democratic State Convention was held at Cedar Rapids, Aug. 15. The significant parts of the platform were these: As a phase of trust question, bearing disastrously on manufacturing interests in Iowa and other agricultural States, we point to the fact that the combination of the manufacturing trusts and the railway trust have resulted in closing many such factories. Many plants in Iowa now stand idle because they have either been driven out of business by unfair competition or have been absorbed by the trusts and closed down.

We demand that railway rates and taxation, as well as legislation affecting railways, shall be shaped and fixed for the benefit of the whole people, without improper interference from the special interests involved.

We condemn the subterfuge of the mulct and pharmacy act by which the Republican party has returned the saloon to Iowa while still maintaining the farce of prohibition. The Democratic party believes in majority rule, it favors the honest and open policy of local control with stringent regulations.

The following ticket was nominated:

Secretary of State, S. B. Crane; Auditor, I. M. Gibson; Treasurer, H. L. Williams; Attorney-General, T. G. Harper; Judge of Supreme Court, J. W. Freeland; Railroad Commissioner, J. E. Anderson.

Two amendments to the Constitution were submitted to the people in November. The one providing for biennial elections was carried by a majority of 25,591. In connection with this amendment, arrangements were made for holding legislative sessions in the even years, so that there will not be another session until 1902.

The other amendment provided for a constitutional convention. This was defeated by a majority of 555.

ITALY, a kingdom in southern Europe. The throne is hereditary in the line of Savoy by male descent in the order of primogeniture. The reigning King in the beginning of 1900 was Umberto I, born March 14, 1844; died July 29, 1900. He was the eldest son of Vittorio Emanuele II of Sardinia, the first King of united Italy. His successor is Vittorio Emanuele, Prince of Naples, born Nov. 11, 1869. The legislative power is vested in a Parliament composed of a Senate containing at present 372 members nominated for life by reason of public services or eminence in science, literature, or other pursuit tending to the benefit of the nation, and a Chamber of Deputies containing 508 members, 1 to 57,000 of population, elected under the law of 1895 by all adult male citizens who can read and write and who pay 20 lire of direct taxes or occupy a farm renting for 500 lire or a tenement or place of business of a certain minimum rental. Soldiers in active service are disqualified while their term with the colors lasts, and no priest filling a clerical charge nor any salaried official except ministers and others answerable to Parliament for the policy of the Government can be elected a Deputy.

In the Cabinet formed on May 14, 1899, and still in office in the beginning of 1900, the ministers responsible for the different departments were the following: President of the Council and Minister of the Interior, Gen. Luigi Pelloux; Minister of Foreign Affairs, Marchese Emil Visconti Venosta; Minister of the Treasury, Dr. Paolo Boselli; Minister of Finance, Pietro Carmine; Minister of Justice and of Ecclesiastical Affairs, Prof. Adeodato Bonasi; Minister of War, Gen. Giuseppe Mirri; Minister of Marine, Rear-Admiral Giovanni Bettolo; Minister of Commerce, Industry, and Agriculture, Dr. Antonio Salandra; Minister of Public Instruction, Prof. Guido Bacelli; Minister of Public Works, Pietro Lacava; Minister of Posts and Telegraphs, Marchese Antonino di San Giuliano.

Area and Population.—Italy has an area of 110,646 square miles. The population was estimated on Dec. 31, 1899, at 31,856,675, about 288 to the square mile. The emigration from Italy is greater than that from any other country. Besides the emigrants who intend to settle across the sea, and in applying for passports declare their

attention, great numbers leave Italy every year to work in other countries, mainly on railroads, embankments, excavation, and masonry. Many of those who go to other parts of Europe for this purpose do not return, but sail for America from foreign ports. Many others return who have lived in America and saved a capital sufficient to establish themselves at home by acquiring a piece of land or discharging the mortgage on land already held. Out of 282,732 emigrants in 1898, Piedmont contributed 21,743, of whom, however, 13,630 were temporary; Liguria 3,292, including 170 temporary; Lombardy 17,707, of whom 11,515 were temporary; Venetia 102,462, but 94,184 were temporary; Emilia 15,268, of whom 10,003 were temporary; Tuscany 14,259, the temporary ones numbering 9,401; the Marches 4,307, including 224 temporary; Umbria 1,060, including 370 temporary; Lazio 2,491, including 189 temporary; Abruzzi and Molise 15,151, including 3,585 temporary; Campania 32,057, including 6,806 temporary; Apulia 3,387, including 1,546 temporary; Basilicata 8,052; Calabria 15,153, including 29 temporary; Sicily 25,579, of whom 4,259 were temporary; and Sardinia 58, of whom 34 were temporary. The total number of temporary emigrants was 155,945. About 2,000,000 Italians had settled abroad before 1891.

The state universities are Bologna, with 66 professors in 1898 and 1,507 students; Cagliari, with 2 professors and 241 students; Catania, with 48 professors and 906 students; Genoa, with 64 professors and 1,256 students; Macerata, with 11 professors and 310 students; Messina, with 45 professors and 591 students; Modena, with 45 professors and 435 students; Naples, with 81 professors and 5,465 students; Padua, with 71 professors and 5,588 students; Palermo, with 61 professors and 2,222 students; Parma, with 42 professors and 550 students; Pavia, with 53 professors and 1,321 students; Pisa, with 56 professors and 1,087 students; Rome, with 75 professors and 2,300 students; Sassari, with 24 professors and 148 students; Siena, with 31 professors and 231 students; and Turin, with 68 professors and 2,551 students. Besides these are the free universities of Camerino, with 18 professors and 234 students; Ferrara, with 2 professors and 77 students; Perugia, with 26 professors and 320 students; and Urbino, with 14 professors and 100 students, making the total number of 21 universities, with 962 professors and 2,440 students. Of the young men called up for military service in 1897, the proportion of illiterates was 37.38 per cent., showing that the law of compulsory education has not been well enforced. Formerly it was not applied in communes where the supply of teachers was less than 1 to 1,000 inhabitants. Among the persons married in 1897, the proportion of males who could not sign their names was 32.98 per cent., and of females 52.13 per cent.

Although the Italian Government is pre-eminently secular and has curtailed the authority of the Church and antagonized the papacy, and although it has recognized the right of all creeds to freedom of worship, Roman Catholicism is still the religion of practically all Italians except the minority who reject religion altogether. There were at the last census about 22,000 belonging to the ancient Waldensian Church of Piedmont, 10,000 Evangelicals, and 30,000 who had been converted to Protestantism by foreign missionaries. The number of Jews was 38,000. The educational institutions are controlled by the Government, which also supports the public schools or shares their cost with provinces and communes. The law demands that children be sent to school between the

ages of six and nine. There were 50,526 primary schools in 1896, with 51,526 teachers and 2,379,349 scholars; 9,000 private schools, with 9,565 teachers and 210,074 scholars; 4,687 evening schools, with 4,848 teachers and 151,369 scholars; 214 higher schools for girls, with 1,765 teachers and 7,319 scholars; 148 normal schools, with 1,622 teachers and 24,152 scholars; 332 lyceums, with 1,852 teachers and 17,689 scholars; 708 gymnasia, with 4,732 teachers and 59,578 scholars; 74 technical institutes, with 1,314 teachers and 10,274 scholars; 381 technical schools, with 2,574 teachers and 37,305 scholars; and 21 schools of navigation, with 183 teachers and 957 scholars.

The Army.—In the levy for 1897 the number of young men who reported for examination was 376,945, of whom 192,103 were put back for a year, 85,256 were rejected as unfit for service, 104,829 were drawn for active service, 551 were assigned to the permanent army on leave, and 94,215 were enrolled in the territorial militia. Young men having a superior education are admitted as one-year volunteers on paying 2,000 lire a year if they join the cavalry or 1,500 lire in the other arms. Noncommissioned officers are engaged for five years of service, and if they serve twelve years they are entitled to civil employment after retiring. The age at which recruits are taken into the permanent army is twenty-one years, and the term of active service is five years for carabinieri and two or three years for the others. The 12 army corps have their headquarters at Turin, Alessandria, Milan, Genoa, Verona, Bologna, Ancona, Florence, Rome, Naples, Bari, and Palermo. The Ninth Corps, at Rome, has 3 divisions, the others 2. There are 96 regiments of infantry of the line, 12 regiments of bersaglieri, 7 Alpine regiments, and 88 military districts; the carabinieri consist of 11 territorial legions, 1 recruiting legion, and 1 mounted squadron; cavalry—10 regiments of lancers, 14 regiments of light horse, and 6 squadrons, with 4 depots for remounts; artillery—24 field artillery regiments, 1 regiment of horse artillery, 3 mounted brigades, 1 brigade of train, 1 regiment of mountain artillery, 22 brigades of coast and fortress artillery, and 5 companies of mechanicians; engineers—5 regiments, 10 companies of train, and 6 companies of railroad engineers. The mobile militia consists of 51 infantry regiments, 20 battalions of bersaglieri, 38 companies of Alpine troops, 31 squadrons of cavalry, 63 field batteries, 78 companies of coast and fortress artillery, 21 companies of artillery train, 54 companies of engineers, and 4 companies of train. The territorial militia consists of 324 battalions of infantry, 22 Alpine battalions, 100 companies of fortress artillery, 30 companies of engineers, and 4 companies of royal carabinieri. There are 14,084 officers in the permanent army, including 250 on half pay; 9,914 officers on leave assigned to the mobile militia, besides 1,048 auxiliary and retired officers, and 10,719 half-pay and reserve officers for the territorial militia. Of the mobile militia, 2,016 were under arms in 1899, and of the territorial militia, 5,394. The strength of the permanent army was 310,602 men with the colors and 503,857 on unlimited leave; of the mobile militia, 465,349; of the territorial militia, 1,941,918; total, including officers, 3,257,491. The African corps numbered 6,750 troops, of whom 5,465 were natives.

The Navy.—The five monster armor clads of the Italian navy—the Duilio, Dandolo, Lauria, Andrea Doria, and *Morosini*—were built before 1887, and although the smallest of them displaces 11,138 tons, and their armor is 18 and 22 inches thick at the water line, and their heavy guns are of 17-inch bore, and their speed is from 15 to 17½

knots, they now rank as second-class ships. The latest *Ammiraglio di Saint Bon* and *Emanuele Filiberto*, launched in 1897, displace 9,800 tons, have 10-inch armor, carry 4 10-inch, 8 6-inch quick-firing, and 8 4.7-inch quick-firing guns, and make 18 knots with 18,000 horse power. Three of the first class are being built—the *Regina Margherita*, *Benedetto Brin*, and *Principessa Elena*—of 13,500 tons, to have an armament of 4 12-inch guns in revolving turrets, and 4 8-inch, 12 6-inch, and 8 3-inch quick firers. Italy possesses powerful deck-protected cruisers, most of them having side armor of good thickness. The oldest and the largest are the *Italia* and *Lepanto*, launched in 1880 and 1883, displacing 15,654 and 15,900 tons, capable of steaming 18 knots, and carrying 4 of the 17-inch or 100-ton guns, with 8 6-inch and 4 4.7-inch quick firers. The *Carlo Alberto* and *Vettor Pisani*, launched in 1892 and 1895, of 6,500 tons, carry 12 6-inch and 6 4.7 inch; the *Marco Polo*, launched in 1892, of 4,583 tons, 6 6-inch and 10 4.7-inch quick-firing guns. The *Re Umberto*, *Sardegna*, and *Sicilia*, launched in 1888, 1890, and 1891, of 13,298 to 14,860 tons, capable of making from 18½ to 20 knots, are armed with 4 13.5-inch guns, and 8 6-inch and 16 4.7 inch quick firers, the 67-ton bow and stern chasers being mounted in pairs in inclined armored barbettes. The new battle ships will have their 12-inch guns mounted in turrets fore and aft, their 8-inch quick firers in 4 turrets amidships, and their 6-inch battery on the main deck, and their armor belt will extend the full length of the ship and protect the base of the turrets, being of 6-inch *Ternii* steel, impervious to shell. A new *Garibaldi* and *Varese* have been launched to replace the cruisers sold to the Argentine Government, larger than they and better armed.

Commerce and Production.—Land is much subdivided in Italy. In Piedmont and Liguria peasant proprietors predominate, and in many other sections some of the cultivators own their farms. In Tuscany, the Marches, and Umbria the system of partnership prevails which was once in common, and is still practiced in different forms in other provinces also. The owner and the cultivator usually share the produce or profits equally, and frequently the same small farm is thus made to support two families. In Venetia and Lombardy the farmers commonly rent their land. Large farms are found in some departments of Lombardy, Emilia, and Tuscany, in Roma and Caserta, in Apulia, Basilicata, and Calabria, and in Girgenti and Trapani in Sicily. The yield of wheat in 1898 was 48,400,000, and in 1899 it was 48,600,000 hectolitres; the yield of maize in 1898 was 26,850,000 hectolitres; of rice, 6,180,000 hectolitres; of wine, 31,500,000 hectolitres; of olive oil, 2,300,000 hectolitres. The number of citrus fruits picked and marketed was 3,930,000,000. The total value of the special imports in 1898 was 1,413,339,346 lire, excluding gold coin and bullion, silver coin, and goods in transit; the value of the special exports was 1,203,569,304 lire. The imports of gold and of coined silver were 3,443,800 lire; exports, 19,612,600 lire. The chief imports of merchandise were wheat of the value of 201,994,050 lire; coal, 137,377,244 lire; cotton, 111,601,392 lire; raw and twisted silk, 61,996,500 lire; machinery, 37,343,770 lire; raw hides, 36,219,252 lire; timber, 35,201,938 lire; wool, 30,631,405 lire; fish, 30,469,190 lire; raw sugar, 19,966,744 lire; leaf tobacco, 15,390,675 lire; coffee, 14,062,055 lire; linen and hemp yarn, 11,163,285 lire; iron and steel bars, 10,079,960 lire; cheese, 5,160,350 lire; printed cottons, 1,692,122 lire; colored and dyed cottons, 1,400,770

lire; bleached cottons, 1,039,880 lire; unbleached cottons, 474,745 lire; refined sugar, 230,399 lire; horses, 21,173,000 lire; refined petroleum, 12,011,265 lire; olive oil, 15,431,895 lire; indigo, 4,768,500 lire; cotton yarn, 2,295,825 lire; railroad materials, 2,038,554 lire; silkworm eggs, 1,480,250 lire. The chief exports in 1898 were raw and thrown silk of the value of 316,025,400 lire; waste silk, 27,059,860 lire; cocoons, 2,776,200 lire; wine in casks, 66,609,356 lire; sulphur, 41,799,810 lire; olive oil, 40,353,122 lire; eggs, 37,786,920 lire; raw hemp and flax, 33,510,754 lire; manufactured coral, 24,045,180 lire; raw hides and skins, 17,141,802 lire; marble, 16,134,109 lire; fresh and salted meat, 15,690,120 lire; rice, 13,713,665 lire; zinc ore, 13,006,400 lire; cattle, 12,505,490 lire; horses, 862,000 lire; hogs, 3,671,457 lire; cereals, 6,351,330 lire; dyes and tans, 9,260,786 lire; raw cotton, 1,869,516 lire; straw braid, 7,461,960 lire; lead ore, 786,100 lire. The value of foreign exports in 1898 was 23,433,000 lire; of the transit trade, 127,885,000 lire.

Railroads and Telegraphs.—Of a total length of 9,592 miles of railroad, 5,608 miles belong to the Government and 92 miles are partly owned by the Government; but the state lines in 1898 were leased to companies for sixty years, though the contracts may be terminated and the Government may resume possession at the end of twenty years or of forty years. The lines built by companies have a length of 3,892 miles. The telegraphs are owned and operated by the Government, except 2,017 miles of line, with 23,310 miles of wire, belonging to railroad companies. The Government lines have a length of 23,600 miles, with 76,510 miles of wire.

Change of Ministry.—The Minister of War, Gen. Mirri, who took an active interest in bringing to the light the secrets of the Sicilian Mafia, was himself implicated by the revelations of the Notarbartolo trial in electoral irregularities, such as are indispensable in Sicilian politics. Partly on this account and partly because of differences of opinion between him and the Treasury Minister in regard to war estimates, he resigned his portfolio on Jan. 4, 1900. On Jan. 7 the Premier, Gen. Pelloux, was appointed by the King to administer the War Office until a new minister could be selected. The question of providing funds for renewing the field artillery stood in the way of the acceptance of the office by any of the generals. In February the Court of Cassation, by a decision quashing a sentence passed upon an anarchist under the provisions of the public safety bill promulgated by royal decree on June 22, 1899, precipitated the discussion of this bill, which the Chamber had decided to postpone, and thus brought on a political and ministerial crisis. The judges took the view that the bill became a mere project of law when the Chamber reassembled after its temporary prorogation at the end of June, 1899; that when the session closed without its receiving parliamentary sanction it lapsed entirely; and that when it was introduced again at the beginning of the winter session it was a draft bill again, not binding upon magistrates until ratified by Parliament. Magistrates were accordingly instructed to suspend the application of its provisions, and debate on the bill was begun on Feb. 24. Its provisions empowered the Government to suppress public meetings, destroy seditious emblems, dissolve subversive societies, punish public servants for striking, and proceed against writers, printers, or publishers of inflammatory articles. It was read twice in the Chamber in the spring session of 1899, but its final passage was blocked by Socialist and Radical op-

struction. The ministers therefore prorogued the Chamber for a few days, and during the recess promulgated the bill by royal decree. This action was condemned, not by the Socialists and Republicans alone, the Revolutionary Left, but by the Constitutional Left, followers of Zanardelli and Giolitti, and by dissentient Conservatives of the Rudini faction, who maintained that the Italian Constitution as traditionally interpreted permits legislation by royal decree only in case of certain tariff modifications, and that it precludes the promulgation by the initiative of the Crown and without previous sanction of Parliament of any political measures. When the Chamber reassembled a week after the promulgation of the bill of public safety, it passed a bill of indemnity, but was prevented by the turbulent Opposition from adopting the bill of public safety itself, which went into force on July 22, 1899, after the violent demonstrations of the Radicals and Socialists had brought the session to an end. The Government refrained at first from applying the new law. Later its provisions were applied by local tribunals, and in the autumn the second section of the Roman Court of Cassation upheld the law on an appeal based on one of its articles. Assuming from this that the decree was provisionally valid, the Government showed no haste after the winter session opened to bring the bill forward for parliamentary ratification, and thus provoke a renewal of violence and obstruction. Obstruction began when the discussion of the articles began after the ministry had secured a vote of confidence on March 2 of 222 to 189. A roll call was demanded on every motion, even on applications for leave of absence. Any 10 members can make such a demand under the rules, but since it was only intended to call the roll as a safeguard in case of important decisions, President Colombo refused to employ it to aid the obstructionists, who thereupon created such a tumult that the sitting was suspended. The clause for the regulation of public meetings came first, and when the closure was voted, shutting off all except those who had given notice of amendments, the Socialists prevented others from speaking by noise and uproar, then made interminable speeches themselves when the Marquis di Rudini offered a proposal to eliminate this clause, and afterward renewed their turmoil and insults when he withdrew it. The excitement was communicated to the people, leading to disturbances and fights between citizens, especially students, who shouted, some for the Constituent Assembly, others for the King. Count Cambray-Digny moved a set of rules to prevent obstruction, and the Opposition hindered the Chamber from taking action upon them until the president stopped speakers who digressed from the subject of debate. When the members of the Revolutionary Left raised the cry for a Constituent Assembly their allies fell away from them. Their determination to discuss constitutional revision and the referendum in defiance of President Colombo's veto led him repeatedly to suspend the sittings. The ministers on March 30 determined, since they could not break the deadlock over the public safety bill, to withdraw it and proceed with urgent economical measures. The Extreme Left, offended by President Colombo's rulings, tumultuously demanded his resignation. He had checked all discussion of the Government proposal amending the rules of debate, had put the motion, and the house had adopted the anti-obstructionist rules by means of a technical violation of the existing rules. The violation was the act of the president of the Chamber, and therefore the Extreme Left, who had won a barren victory and

held the field from which the enemy had retreated in good order by the withdrawal of the public safety bill, resolved to continue the campaign by assailing President Colombo. When the house met on March 30 they shouted insults and oburgations, stamped and slammed desk lids, raised such a din, created such a scandal, and affronted the president with such offensive epithets that he left the chair without opening the proceedings, whereupon the Extremists and their Moderate and Conservative allies marched out in triumph. The latter made it more difficult for the president to retain his office than the noisy Socialists by resigning their membership in the presidential bureau. To clear the situation President Colombo offered his resignation. In the secret ballot on April 2 he was re-elected by 265 votes to 158 over Signor Biancheri, many of the Rudinians having voted with the Government. Before Count Cambray-Digny's amendments to the rules of procedure were put to the vote by summary procedure without discussion, on April 3, the Deputies of the Left and the Extreme Left, contesting the regularity of the late proceedings, announced that they would never recognize the validity of the proposed rules and left the house in a body, shouting for a Constituent Assembly. The Chamber then adopted the amended procedure almost unanimously, and adjourned till May 15. When the Deputies reassembled on that date Signor Giolitti proposed a committee to consider a compromise on the question of procedure. Signor Ferri, speaking for the Extreme Left, announced a determination not to permit any discussion under the amended rules, and to oppose their application by every legal means, even by violence, if necessary. When business was opened under the new rules the Socialists began to sing in chorus, and drowned the president's voice by beating desks. On the following day the Chamber was dissolved by royal decree. Elections were held in the beginning of June, so that the new Chamber could be assembled to vote provisional supplies before June 30, the end of the financial year. The Clericals voted in greater numbers than in former elections, disregarding the papal interdiction in spite of the efforts of the clerical organizations to make them give up their ballot papers to be forwarded to the Vatican.

Serious riots occurred in Milan and other industrial centers, which were suppressed only by the firmness of the military authorities and the discipline and fidelity of the troops. The result of the elections was a victory for the Extreme Left, which increased its number of seats from 69 to 97. The ministerial party lost as many, while the Constitutional Opposition returned in about the same strength as before. The Socialists, who numbered 15 in the former house, doubled their representation. Although the ministry had still a majority of nearly 100, the outcome was a moral defeat so serious that after the Chamber met on June 16 and elected a presiding officer—who was not Signor Colombo, because he had lost his seat—and had granted provisional supplies, Gen. Pelloux offered the resignation of the Cabinet on June 18, and insisted on its acceptance. On June 20 King Umberto commissioned Signor Sarocco, president of the Senate, an aged Liberal, to form a new ministry. He constructed one on the basis of the majority that had elected Signor Gallo president of the Chamber. Its composition, announced on June 24, was as follows: President of the Council and Minister of the Interior, Giuseppe Sarocco; Minister of Foreign Affairs, Marchese Visconti Venosta; Minister of War, Gen. Conte Ponza di San Martino; Minister of Marine, Admiral Morin;

Minister of Justice, Signor Gianturco; Minister of the Treasury, Signor Rubini; Minister of Finance, Signor Chimirri; Minister of Public Works, Signor Branca; Minister of Public Instruction, Signor Gallo; Minister of Agriculture, Signor Carcano; Minister of Posts and Telegraphs, Signor Pascolato. The Moderate Liberal element predominated in the new Cabinet, which included three representatives of the Right and three from the Opposition, one a pronounced Zanardellian. When the Chamber met on June 27 the Premier read a conciliatory declaration of policy. Tommaso Villa, a member of the Liberal Opposition, was elected to succeed Signor Gallo as president of the Chamber, and when he took the chair he appointed a commission to draft new rules of procedure. The new Chamber would grant no more than a month's supplies until it received an assurance that the Government would not plunge into Chinese adventures more deeply than was required to preserve Italy's place in the concert of the powers. The new standing orders, dictated by the Opposition, permit the suspension for a week only of Deputies who create a disturbance. On July 10 the Chamber adjourned after voting provisional supply until the end of the year.

Assassination of King Umberto.—On July 29 the King was shot dead at three paces by an anarchist at Monza, where he had taken part in distributing prizes at an athletic competition. The murderer was a young silk weaver, who had resided in the United States since 1897. He left Paterson, N. J., for Italy in the preceding May, and stayed at the house of his brother near Prato, where he practiced with the revolver to give him skill for the deed which up to the time of his conviction at Milan, on Aug. 29, and sentence to penal servitude for life (the extreme punishment permitted by the Italian code) he persisted in declaring was conceived and planned by himself alone. He avowed that he was impelled to kill the King by a desire to avenge the miseries of the people; that he had formed the design after the state of siege was proclaimed in Milan and Sicily. Three shots were fired at King Umberto, who fell back in his carriage and died instantly from one that pierced his heart. In spite of the assassin's denials, there was evidence of a plot and of the connivance and pecuniary aid of anarchists in American and probably in Italian cities and in Paris and London. The assassin was a skillful and industrious worker, who had borne a good reputation and had saved money. His demeanor during

the trial was self-possessed and alert, and he answered all questions calmly, in well-chosen phrases, with an appearance of frankness.

Vittorio Emanuele III marked his accession to the throne by a proclamation extolling the dead King's courage, his devotion to the people of Italy, and his faithful guardianship of the unity and independence of Italy, declaring his own determination to defend the monarchy and to preserve constitutional liberty as linked together and both indispensable for the supreme welfare of the nation, and asserting the retention of Rome as the surest rampart of his reign and the best guarantee of Italian unity. The new King reorganized and reduced the royal household; he inspected public institutions; he visited the garrisons, where he enjoined upon military officers the duty of wearing their uniforms constantly, setting the example himself; he removed the barrier that has prevented frequent intercourse between the King and politicians by appointing an hour when those who wished could confer with him any day; and he participated actively in the deliberations of the ministry. Premier Sarocco unfolded the programme of the Cabinet in a report to the King, published before the reopening of Parliament in November. All politicians desired to signalize the beginning of the new reign by a reduction of taxation if it could be secured without endangering the stability of the budget, and some suggested the shifting of a part of the burden that oppressed the poor upon the shoulders of the rich. Signor Chimirri had a plan for the diminution of some of the vexatious demands upon small taxpayers, including abolition of the tax on the lowest incomes. After disposing of the budget, the work proposed for Parliament to do was to consider an emigration bill that had long been before the Chamber, then to discuss bills for reform of local administrative bodies, for abolition of the enforced residence of dangerous characters, for repression of anarchist crime, and for improving the position of school-teachers. Military estimates were to be maintained within the limits already reached, and provision would be made for renewing the artillery without extra expenditure. The naval estimates were increased by new credits for construction. Additional legislation was required for the protection of the labor of women and children. The Chambers would also have to decide upon the best conditions for the renewal of the commercial treaties with Austria and Germany, also the terms on which railroad conventions will be renewed.

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JAPAN, an island empire in the Pacific Ocean, eastward from China, between the Russian and the American possessions, extending from north latitude 21° 48' near the Philippines to 50° 56' near the Kuriles, and from east longitude 156° 32' to 119° 20'. Of the 4,000 known islands, 487 have an area of more than 6 square miles, and about 500 are inhabited, though a majority of the people in the empire live on Hondo, the main island. The five larger islands are Hondo, Kiushiu, Shikoku, Hokkaido or Yezo, and Formosa. The coast line of the entire empire measures 18,542 miles. The total area is 162,372 square miles. The population, Dec. 31, 1898, was 46,540,754. The money standard is gold, a yen being worth 50 cents.

Over this constitutional empire the Emperor Mutsuhito not only reigns, but governs. He is the one hundred and twenty-second of the traditional line of Mikados, and was born Nov. 3, 1852,

and ascended the throne Feb. 18, 1867. The heir apparent, Yoshihito, born Aug. 31, 1879, proclaimed heir Aug. 31, 1887, married, May 10, 1900, the Princess Sada, his cousin, the third daughter of Prince Kujo. Only male descendants—natural children of the Emperor or sons of an Empress—can succeed to the throne. The laws relating to marriages in the imperial family, promulgated in May, 1900, forbid marriage before the age of seventeen in the prince and of fifteen in the princess, and during any period of imperial mourning. The Emperor shares legislative power with the imperial Diet, which consists of two houses—the upper house, having 316 peers and imperial nominees, and the lower house, 300 members, elected by male voters who, according to the new law of elections, pay direct national taxes to the amount of 10 yen (\$5). By the new law of 1900, the House consists of 360 members, from 16 urban and 308 rural

districts. Since 1889 constitutional reform has been almost continuous, and has been effected without popular disturbance.

The fifteenth annual meeting of the Diet took place Dec. 22, 1900. The second Yamagata ministry, after twenty-two months of office, retired in September, 1900, thus ending the last of the 40 ministries since 1868, and of the 7 constitutional cabinets since 1889, composed of the "elders," or statesmen, of the Restoration of 1868. Marquis Hirobumi Ito was called for the fifth time to form the new Cabinet, which begins its work Oct. 19, and consists, with the exception of himself, wholly of young men trained for the most part in the United States and Europe, and under modern constitutional forms. In the three months' session of "the spendthrift Parliament" of 1900, ending Feb. 24, 37 out of the 50 bills brought forward were debated, nearly every measure advocating expenditure from the treasury. Of those withdrawn, a great majority were schemes for fostering private enterprises.

The Emperor's Cabinet consists of the Minister-President of State and the 9 heads of departments. There is also a Privy Council of 20 veteran statesmen, who have great influence, especially in the formation of cabinets and the appointment of envoys and officers. There is also a Court of Accounts, an Administrative Tribunal, and a bureau administrative for each of the chambers of peers and of deputies. These all form the Central Government, in which are employed 49,208 salaried functionaries, whose salaries require 12,599,955 yen. Under imperial control are also the prefecture of the police of Tokio, the Department of Colonization of Yezo, the (46) prefectures and (866) districts, and the government of Formosa, in which 4 provincial governments are employed 19,608 salaried officers, who draw 5,987,755 yen from the treasury, making a total civil list of 58,876 persons, drawing 18,587,170 yen from the national treasury. Since the war with China, in 1895, the number of officials and the amount of salaries have increased more than 50 per cent.

Population.—For more than a hundred years, in the eighteenth and early in the nineteenth century, the population was stationary. Since 1870, when the first scientific census was made, showing that the empire contained 7,107,841 houses and 33,110,825 souls, the population has increased steadily, until at the end of 1898 the number was 6,540,754—the nobles numbering 3,845, gentry 666,301, the remainder being the common people, many of the gentry of former years having voluntarily dropped into the ranks of the commons. The average yearly increase for a decade has been nearly 500,000. The excess of births over deaths in 1898 was 531,891, three fourths being on Hondo. The rush of inhabitants from the country to the cities, of which there are 48 called great and 30 more which, like the larger ones, have over 20,000 inhabitants, and the change of Japan from an agricultural to a manufacturing country, are very marked. In Tokio the population is now 1,002,863, the growth being in the suburban districts, and showing an increase of 200,000 since 1887. Osaka, with 821,235 souls, increases relatively even more than Tokio, making increase during 1897 of 59,311, compared with Tokio's 38,194. Emigration is also active. In 1898 33,297 persons received passports to travel abroad, and 70,801 Japanese dwelt outside of Japan. Of these, 15,000 were in China, 1,000 in English colonies, and 44,000 in the United States; 11,589 foreigners resided in the empire and 32,426 tourists traveled in the country. In the Hokkaido 63,629 persons were immigrants and 1,381 went out, the majority of immigrants being

farmers and fishermen from central and northern Japan. The total population of Yezo island is 650,000, or about 18 to the square mile. Of the Ainu aborigines there were counted 17,573; births 534, deaths 529. In 1898 the marriages in the empire were 471,217, divorces 99,469, and of the 1,261,137 births, 108,485 were illegitimate. In the empire there were, in 1897, 42,542 doctors, 35,384 midwives, nurses, and trained women, and 25,000 pharmacists and druggists; 705,028 persons suffering from fire or water were helped at a cost of 734,633 yen, and 736,270 yen were spent for those in famine. In 1897, besides 7,740 suicides, there were 4,542 violent deaths. In 146 prisons, with 12,177 functionaries, there were 70,784 prisoners. In houses of prevention, 190,286 persons entered and 179,098 passed out; the figures for houses of detention were 274,952 and 217,098 respectively.

Finances.—Since Oct. 1, 1897, Japan has employed the gold standard, which was adopted without disturbance of the trade or loss to the national treasury, and the bonds of Japan are now international commodities. From Oct. 1, 1897, until March 31, 1900, the new gold coins struck at the mint amounted to 115,194,600 yen, but in the same period 20,514,364 yen of silver pieces were struck, and these are seen everywhere, there being about 45,000,000 of these silver coins in circulation, whereas the 8,738,730 gold pieces coined during the past three years are rarely seen. The profit of the mint since the introduction of the gold standard in 1897 was 6,681,319 yen; whereas, the total profit in the mint from 1870 to 1897 had been only 12,152,444 yen, the result being from the striking of subsidiary silver coins under the new system, these covering all losses in connection with the change of monetary standard. The tendency of prices to rise continues unabated. The amount of currency in Japan at present is a little over 5 yen per capita, against 70 in France, 38 in Germany, and 33 in England. The funds of the Bank of Japan, for lending, are about 90,000,000 yen, while the volume of negotiable securities offered to it is 700,000,000 yen annually. The outlays of the Japanese Government since the China-Japanese War have nearly trebled, the increase being chiefly in military and naval expenses. The total deposits in the savings banks of all descriptions aggregate 45,000,000 yen, or not quite 1 yen per capita. For 1899-1900 the total revenue was 253,000,000, and the expenditures 250,000,000. The budget for 1899-1900 shows an ordinary revenue of 193,000,000 and an extraordinary revenue of 60,000,000 and an expenditure of 250,000,000 yen; that of 1901-'02, ordinary revenue 201,000,000, extraordinary 52,000,000; and of expenditure of 252,000,000 yen. Japanese economists reckon that Japan's war fund, consisting of gold coin in London, deposits in the Bank of Japan, 4-per-cent. bonds, capital fund for war ships, with reserves in connection with national calamities, education, and indemnity, amounts to nearly 150,000,000 yen. The public debt in 1899 was 418,365,389 yen. At the close of 1899 there were 2,032 banks in operation, with a capital of 438,189,469 yen.

The Army.—After the war with China (1894-'95) the army was reorganized into 12 divisions (instead of 6), in addition to the Imperial Guard, with a total of 119 generals, 1,097 superior officers, 7,244 officers, 5,821 underofficers, 32,733 noncommissioned officers, and 268,754 soldiers, making a total of 315,808, with 4,233 civil functionaries in the War Department. Of this total, 125,345 are in the active service, 115,666 in the reserve, and 74,797 in the territorial army. In the recruiting operations of 1897 477,555 males, conscripts and volunteers, came under inspection,

of whom 66,023 were above the conscription age of twenty years. The artillery soldiers garrison the forts, and the 12 divisions are located in different sections of the empire, usually in large camps and barracks, where the drilling, training, and daily education of the soldiers can take place with facility. In army education there has been in recent years vast improvement, since so large a percentage of the volunteers and conscripts are graduates of the middle and elementary schools. The number of illiterates is small—in 1897-'98 only 11,790—while the graduates of the ordinary and the upper elementary schools number more than 60,000, and of the middle schools or academies more than 500. For the campaign in China in the summer of 1900, the Hiroshima division, with some additions from two or three others, making a body of 20,000 men of all ranks and arms, was dispatched under command of Lieut.-Gen. Yamaguchi, under whom were Major-Gens. Fukushima, Terauchi, and Oku. The men were armed for the most part with the new Arisaka rifle, which is very light and simple, carrying a magazine of five rounds. The definitive establishment of officers (on a peace footing) is 3 field marshals, 3 full generals, 21 lieutenant and 48 major generals, 96 colonels, 118 lieutenant colonels, 481 majors, 1,397 captains, 1,500 lieutenants, and 1,302 second lieutenants.

The total membership of the Red Cross Society is 693,179, of whom 46,320 are life members, the annual contribution amounting to 1,904,365 yen. Two hospital ships, with names meaning Savior and Mercy, especially built and equipped for the service, with all modern appliances, were in constant use for natives and foreigners, during the Chinese campaign, in the expedition from Tientsin to Peking, in which the Japanese casualties reached a total of 797.

The Navy.—Most of the new ships contracted for in Europe and the United States after the Chino-Japanese War are afloat and in commission. The resources and classification of the imperial navy of 70 ships and 66 torpedo boats, at the end of 1900, are 8 battle ships (first class, above 10,000 tons, 6; second class, below 10,000, 2); 20 cruisers (first class, above 7,000, 6; second class, above 3,500, 9; third class, below 3,500, 5). Ships for coast defense are rated the same as cruisers, but while the first and second class are wanting, there are 10 in the third class. Of 15 gunboats, there are 2 in the first class above 1,000 and 13 in the second class below 1,000 tons. There are 4 dispatch boats, 1 torpedo depot ship, 12 torpedo catchers. The 66 torpedo boats are rated in 4 classes. The battle ship Mikasa, 15,150 tons, launched in November, is the largest war ship afloat. The total number of sailors, marines, officers of line and staff, construction and administration, under the Navy Department is about 25,000 men.

Communications.—A railway system of 7,000 miles would not be sufficient for the needs of Japan. The first railway, between Tokio and Yokohama, was finished, despite antiforeign clamors, in 1872, and but few more railways were built until 1880. The length of railways now in the empire is 3,700 miles. The number of companies holding provisional charters in 1900 was 16. Of 68 applications for charter to build railways in 1901, 12 were rejected and 56 granted. The aggregate capital of these companies is 80,940,000 yen, and total mileage secured is 1,523, making a grand total for the empire when finished of 5,830 miles. In 1900 227 miles were opened for traffic, 102,115,942 passengers traveled (showing an increase of 3.1 per cent. over last year), paying for passage 23,417,376 yen, while 18,820,024 tons of freight

were carried, on which 12,726,845 yen were paid, giving a balance of net profit on freight and passengers of 10,386,055 yen. The increase in freight traffic, and money paid for the same, was 26.6 and 39.1 per cent. respectively. Most of the roads are single track, only 250 miles being double. The aggregate capital employed in railroads is about 300,000,000 yen. Besides those under Government ownership, there are more than 100 private railway companies. The length of the postal routes by land and sea is 100,000 miles. In 1898 157,514,549 letters, 329,933,823 postal cards and other packages were carried. There were in the postal and telegraph service 4,537 offices, 39,295 postal boxes, and 38,000 employees. To foreign countries 2,922,663 pieces were sent, and from them 2,749,784 pieces received. Over 5,295 miles of telegraph route, having 20,561 miles of wire, 15,342,535 domestic messages were sent. By submarine cable, 333,000 foreign dispatches were transmitted. There are 640 miles of telephone routes and 13 stations, chiefly in the large cities. In 1898 10 street-car companies, with 420 cars and 1,620 horses, carried 36,872,845 passengers. In 1898 there were 1,130 steamers, of 477,430 tons, and 1,914 sailing ships, of 170,894 tons, and 19,097 junks, of 16,601,420 bushels' capacity. In 1899 115 lighthouses built by the Government and 22 by private authorities lighted the coast.

Religion and Education.—According to the Constitution of 1889, all religions are equal before the law. Article XXVIII declares that "Japanese subjects shall, within limits not prejudicial to peace and order and not antagonistic to their duties as subjects, enjoy freedom of religious belief." Legislation, despite the virulent opposition of the Buddhist hierarchy, steadily proceeds toward carrying out the constitutional provisions, especially in freeing impartially from taxation all ground and edifices for religious purposes. In Shinto, no longer a state religion, there are 12 sects, 100,705 priests and shrine keepers, and 1,357 pupils. In Buddhism there are 38 sects, 103,340 priests and preachers, with 10,983 pupils. Shinto temples number 1,962, and Buddhist temples (usually much larger than Shinto) 109,945.

In Tokio the Christians have 70 church edifices and 55 preaching places, with an enrollment of 13,711 members; 5,221 Sunday pupils in 112 schools, with 2,251 Christian students, 9 theological schools, and 9 industrial, poor, and primary schools, having 5,423 pupils. They publish 19 periodicals. The value of mission property in Tokio, including the Christian Association building, is 1,200,000 yen. About 2,000,000 copies of the Bible, or portions of it, have been distributed by sale or gift. The Emperor accepted a copy in 1895. In all 944,000 Scripture portions have been circulated since 1890, in addition to those imported and sold to the trade. In the public schools, out of 7,125,968 children of school age 4,910,380 attend daily, the other 2,215,586 remaining at home, making in 1898 an attendance of 69 per cent. Of Christian schools, despite their having been greatly crippled by the interference of the educational authorities, there are 204, 68 of which are above the middle course, with 15,846 pupils, 9,394 being in the primary course. Mr. Naruse, a Christian educator, has obtained the gift of nearly five acres in Tokio and the sum of 130,000 yen for the establishment of a woman's university. In the Government schools, besides 90,000 native teachers, 270 foreigners are employed, the majority being American, English, and French. Students still go abroad to study, a large number preferring Germany, and there is a distinct trend toward the adoption of German ideas and culture, yet the

vast majority of students and educated people use the English language, and the regulations of the Department of Education, published in 1900, have greatly extended the study of English in the schools. The agitation for the use of the Roman letter in writing Japanese has resulted in official sanction and regulation. The general discussion, on the lecture platform and in the periodical press, in favor of a higher public morality, not only personal but commercial, was one of the features of the year.

In the history of Japanese morals, three eras are noted. Under feudalism, the basis of morals was "loyalty." From 1868 until the Constitution of 1889, the basis was "patriotism." Since then the basis has been "society." Political corruption has extended from the courtier to the bureaucrat, and now to the people at large, and the cry for improvement of personal and commercial morality is the burden of the more respectable of the 800 journals published, with a circulation of 440,000,000. The Yoshiwara, or licensed system of prostitution, centuries old, is in process of radical reform. In Tokio there were 458 houses in which were 6,835 women, most of whom, taken in childhood and trained up by their quasi owners, were not allowed ever to leave the Yoshiwara inclosures except in case of death or illness of a near relative, nor allowed even to walk about inside without guards. The system made the women little better than slaves. Largely through the agitation of the Salvation Army agents new police regulations were issued in 1900, enabling every inmate to receive her freedom if she desires it. As a result, more than 500 women have left the quarters in Tokio, and more in other quarters of the empire.

Resources.—The year has been marked by the discovery of more oil fields on the western coast of Hondo, and of gold at Esashi in Yezo, the total product of gold being, for lack of official oversight in the hasty discovery, three times as great as the figures, which are for nine working months of the year. The Government reports show that 164,366 persons obtained 1,250 pounds of gold. In Hondo the two copper mines of Ashiwo and Beashi produce 1,300,000 pounds of copper annually, which is sold for 4,200,000 yen. In 1897 the production of iron from ore, compared with copper, was as 7 to 5, manganese as 4, coal as 5, sulphur as 3, and petroleum as 9. In general, the mineral products are not reckoned among the best sources of the wealth of Japan, and attention is turned more and more to manufactures and commerce. In 1900 283,460 tons of coal were exported, valued at 1,590,921 yen—the best record yet made in coal. Experts appraise for Japan a fifty-year supply only.

The year has been noted for excellent crops, rice being the most valuable, reports from all the rice producing centers making it 22,200,000 bushels, or 14.3 per cent. above the average crop, which is 194,000,000 bushels. The barley crop has yielded 101,600,000 bushels, or 8.1 per cent. larger than the average. The tea exported in 1899 from Yokohama was 27,969,178 pounds. While the mulberry farms are increasing in area and output, those of the tea plant are diminishing, showing the increase of manufacturing interests. The value realized in 1899 from the export of silk was 62,627,721 yen, against 20,598,621 yen in 1891, while tea yielded 8,251,664 yen for the total crop of 158,282,214 pounds, against the 131,247,564 pounds, valued at 6,786,977 yen, in 1890. The season's crop of silk cocoons is 13.1 per cent. increase over last year. The production of raw silk in 1890 was 2,529,816 pounds, and in 1899 5,257,773 pounds.

Fifteen million yen are invested in cotton spinning, there being, in 1900, 1,088,339 spindles, and the output being for the first half of 1900 154,000,000 pounds of yarn and cloth, of which 2,975,019 yen's worth were exported; the latter low figure being on account of the stoppage of trade through war with China. In fisheries 3,005,429 people are employed, who take 36,476,959 yen's worth. Tobacco is now a sort of Government monopoly, the crop being stored in 66 monopoly offices. The new developments of industry and trade include the formation of a tobacco trust, capitalized at 10,000,000 yen, and another of a cotton-yarn trust. The tobacco crop for 1900 is officially estimated at more than 6,500,000 pounds. In 1899 4,965,000 yen's worth of ceramic wares was exported, but relatively the lacquer and the porcelain trade, both of them still existing as cottage industries, have fallen behind the textile industry, in which there are combination factories with capital. Foreign trade for the first half of 1900 reached a total of 258,196,861 yen, of which there were exports 94,987,854 and imports 136,208,807.

In 1899 the total trade of Japan with the British Empire exceeded 180,000,000 yen, of which 56,000,000 yen was with Great Britain, while the trade with the United States exceeded 104,000,000 yen. Compared with 1893, there is an increase in railway traffic of 4,000,000 to 11,000,000 passengers; in the mercantile marine, from 200,000 to 700,000 tons; in the capital of commercial and industrial companies, from 230,000,000 to 900,000,000 yen; in clearing-house transactions, from 200,000,000 to 1,700,000 yen; of loans paid by the Bank of Japan, 50,000,000 to 150,000,000 yen; of foreign trade, 170,000,000 to 500,000,000 yen.

Politics and Events.—Early in 1900 the bubonic plague invaded Osaka and Kōbe, but was stamped out after several score of deaths. Rats having been found to be subjects and vehicles of the disease, rewards were offered for their destruction. In Tokio 110,000 were killed and paid for. Dr. Kitasato discovered a serum believed to be efficacious in counteracting the virus of the pest. Under the new treaties abolishing the extraterritorial and consular courts, Miller, an American, was executed for murder under Japanese law, Jan. 15. Sir Ernest Satow exchanged places with Sir Claude McDonald, the one going to Peking and the other to Tokio. Russia has deprived Japanese subjects of the right to fish in the waters of Saghalien, and 269 stations are to be closed and all Japanese leave the island. Imperial sanction was given to the law providing that name seals are sufficient on documents where hitherto signatures have been necessary. Noticeable changes have been made in the Japanese diplomatic corps—Mr. Takahira, Vice-Minister of State for Foreign Affairs, succeeding Mr. Komura in Washington, Baron Hayashi going from St. Petersburg to London, and Mr. Kato Takeaki from London into the Cabinet. The imperial wedding, bridal tour, and issue of memorial stamps took place in May, with many accessories approaching Western etiquette and customs. Snow fell on Mount Fuji Sept. 24, twelve days earlier, and on Mount Okaru twenty days earlier, than usual. Rear-Admiral Beardslee, in 1853 a lieutenant in Commodore Perry's squadron, was received by the Emperor, and at a large garden party, with many relics of a half century ago, heard addresses from Japan's eminent men recalling early days. A memorial to Perry is to be erected at Uraga, in the form of a lighthouse, surmounted with a bronze statue of the commodore. In November the training ship *Taukushima Maru*, with all her crew of 111 persons, was lost off Numadzu.

Formosa.—Despite petty insurrections of savages and bandits, the population—numbering, Dec. 31, 1898, 2,729,503, not including resident Japanese or the inaccessible red aborigines in the mountains—is being rapidly brought into order and prosperity. Hopeful experiments have been made in organizing the native Formosans in military service. Government schools have been opened. In the six years of Japanese possession 140,000,000 yen of public money have been invested, which now yields a revenue of 16,250,000 yen. The estimate of expenditures for the next year is 22,000,000. The island, with its 300 miles of coast line and its 14,000 miles of territory, derives its revenue from the opium, tobacco, and land tax, and the camphor monopoly. In 1898 the opium trade for the benefit of the Chinese and Formosans was placed in the hands of Japanese officers. The sales in 1899 amounted to 470,520 pounds, valued at 4,219,604 yen, on which the profit was 1,120,000 yen. In February, 1900, there were 140,139 opium smokers and 3,372 opium dealers, the known percentage of smokers showing increase of the habit. Of the world's product of 8,000,000 pounds of camphor, Formosa supplies 6,600,000 pounds. At the present rate of consumption, Formosa has an ample supply for the next eighty years, and with judicious planting, even though the camphor tree requires fifty years to reach maturity, the supply may be perennial. The revenues for the current year are 14,601,577 yen, and the budget for 1901 or the next year 16,298,598 yen, the camphor yielding 4,592,310 yen, opium 4,287,888 yen, and salt 723,708 yen. The expenditure on railways is to be increased from 2,500,000 to 4,500,000 yen, and the land surveys from 600,000 to 700,000 yen. The railway from Takao to Tainan, 40 miles, was finished in October, 1900.

The staples of export are sugar, camphor, and tea, and all values have an upward tendency. The enterprises of mining, forestry, and reclamation of land show steady improvement. The Bank of Formosa, now but a year old, has done an encouraging business. Its deposits amount to 40,000,000 yen. In 1898 there were cleared, from the 12 ports open to commerce, 14 steamers and 2,019 Japanese sailing vessels, with a total capacity of 70,000 tons, besides 151 foreign steamers and 1,806 sailing vessels, having a total of 168,000 tons. Of vessels entering, there were 17 Japanese steamers and 2,067 sailing ships, with a total of 68,000 tons, besides 169 foreign steamers and 1,887 sailing vessels, with a tonnage of 186,000. In 1898 3,850 emigrants, half of them women from old Japan, landed in Formosa, in which, with the Pescadores, 2,202 Japanese families, including 9,326 persons, are now permanently settled.

JEWS. The interest that for some years past was felt in organizing agricultural settlements in Palestine, which met with varying success, received a marked impetus early in the year by the announcement that Baron Edmond de Rothschild had ceded his colonies to the Jewish Colonization Association. For some time the baron had aided several small colonies, but as they were not self-supporting, and never likely to be so long as they could depend on his aid, the step was taken which secured the efficient co-operation of a society that was Baron de Hirsch's chief heir at law.

The visit of the delegates of the American Council of Jewish Women to London resulted in the organization of a Jewish Study Society, for lectures and research in Jewish history and literature, which will co-operate in some degree with the Jewish Chautauqua that Rev. Dr. Berkowitz founded in Philadelphia.

The blood accusation was revived both in Bohemia and in West Prussia, and riots against the Jews followed. There was a trial and an indictment, a quashing of the verdict and a retrial, and the incident is not yet closed. It has been marked by great excitement among the peasantry and excesses against the Jewish inhabitants. The courage of Prof. Masaryk, who is not an Israelite, in writing against the blood accusation, was a happy feature of the situation; and the Semitic section of the Congress of Orientalists at Rome passed unanimously a resolution to the same effect. In Austria there has been no pause in the anti-Semitic movement, which has been combined with clericalism. It has acquired a virulence, however, which can not endure if the better class of electors assert themselves.

In Roumania an emigration *en masse* began, owing to harsh anti-Jewish laws, but it was checked in time to prevent the departure of more than a comparatively few thousands, most of whom came to the United States and were distributed to interior towns by the co-operation of Jewish societies.

The fourth International Congress of Zionists, held in London, shed no new light on the movement, but showed the continued enthusiasm of its adherents, without as yet any tangible and practical fruit of their labors. It would seem that there is a disposition to lay stress on the political side of Zionism, so far as a Jewish state is concerned, but more emphasis is directed to the need of colonization in Palestine, to which a further impetus was given by a meeting in March, in Frankfurt, of societies that are interested in that line of work. Anti-Jewish riots that broke out in Odessa (July 29) were promptly checked, and a large number of the rioters were arrested by the police and the troops.

In France, perhaps owing to the sense of solidarity strengthened by the Dreyfus trial, a new society was formed, L'Union Libérale Israélite, to develop a love for Judaism, with special efforts to interest the young. In Paris, Sunday lectures on Judaism and its history were given for some months. The literary activity of the French Jews was attested not only by the continued success of the *Revue de la Société des Études Juives*, but by the first volume of a new French translation of the Old Testament, with a special edition for the young, and by M. Schwab's *List of Articles relating to Jewish History and Literature* which were published in Periodicals from 1783 to 1798.

In Germany there was no cessation in the appearance of works on Judaica and Hebraica, showing the continued interest in such studies, a complete list of which for the greater part of the year is given, from the pen of Israel Abrahams, in the *Jewish Yearbook* (1900), issued by the American Jewish Publication Society of Philadelphia.

At home the educational impetus of the past few years was remarkably well sustained. The second triennial convention of the Council of Jewish Women, at Cleveland (March 4-9), indicated the great progress of that society, with nearly 5,000 members, and its special sections devoted to Jewish studies, philanthropy, and educational work. A junior organization was to be effected. The Jewish Chautauqua was authorized at the quinquennial convention of the I. O. B. B., to co-operate in the formation of a lecture bureau, which shall secure lectures for the lodges so as to improve the intellectual standing of the order. The growth of agricultural work was shown by a further development of the National Farm School, at Doylestown, Pa., the organization of a special society in Chicago for that purpose, and increased

efforts by the Baron de Hirsch Fund in connection with its New Jersey settlements. The first convention of the National Conference of Jewish Charities in Chicago (June 11) marked a distinct step forward in the history of Jewish benevolence. The death of the Rev. Dr. Isaac M. Wise led to a general movement to establish a memorial fund for the Hebrew Union College, and about \$100,000 was received or promised out of the half a million desired. Among the new institutions opened were the dispensary of the Chicago United Hebrew Charities, the Philadelphia Young Women's Home, the Lucien Moss Home for Incurables, the New York Young Men's Hebrew Association building, and the Brooklyn Hebrew Educational Institute. The literary movement included the first volume of Lazarus's *Ethics of Judaism* (Jewish Publication Society), a *Heft* of Jastrow's *Talmudic Dictionary*,

a volume of Rodkinson's *Talmud* in English, a specimen of the Mexican Inquisition documents, by the Jewish Historical Society, and the co-operation of our scholars in the production of a Jewish encyclopædia, the first volume of which is almost ready for publication.

New life is exhibited by the B'nai B'rith, which took upon itself with success the distribution of Roumanian immigrants and is establishing lodges among the Russian newcomers, besides pushing its work abroad in Germany and the Orient and considering the advisability of entering France. Two synagogues in San Francisco and one in Cleveland celebrated their fiftieth anniversaries. President McKinley visited the Nathan Barnett Memorial Temple, in Paterson, N. J., during service on the seventh night of Passover. Dr. Jacob H. Hollander was appointed treasurer of Porto Rico.

K

KANSAS, a Western State, admitted to the Union Jan. 29, 1861; area, 82,080 square miles. The population, according to each decennial census, was 107,206 in 1860; 364,399 in 1870; 996,096 in 1880; and 1,427,096 in 1890. By the State census of 1895 it was 1,334,688; by the Federal census of 1900 it was 1,470,495. Capital, Topeka.

Government.—The following were the State officers in 1900: Governor, William E. Stanley; Lieutenant Governor, Harry E. Richter; Secretary of State, George A. Clark; Treasurer, Frank Primes; Auditor, George E. Cole; Attorney-General, A. A. Godard; Superintendent of Education, Frank Nelson; Commissioner of Agriculture, F. D. Auburn; Adjutant General, S. M. Fox; Superintendent of Insurance, W. V. Church; Oil Inspector, C. O. Spencer; Grain Inspector, A. E. McKenzie; State Printer, W. Y. Morgan; Board of Charities, John Hannan, G. W. Kanavel, Reuben Vincent, Grant Hornaday, Edwin Snyder; Bank Commissioner, J. W. Breidenthal; Labor Commissioner, V. L. A. Johnson. All the elected officers are republicans. Chief Justice of the Supreme Court, Frank Foster, Populist; Associate Justices, W. A. Johnston and W. R. Smith, Republicans.

Population.—According to the Federal census of 1900, the population of Kansas was 1,469,496. In 1890 it was 1,427,096; therefore the gain for the decade was 42,400, an increase of 3 per cent., while that of the total population of the United States was 21 per cent. This small percentage is a great measure due to the fact that between 1890 and 1900 many thousands of people removed from Kansas to settle the neighboring Territory of Oklahoma. For several years after 1890 the population of Kansas declined, but the census of 1900 shows that the tide has turned. In 1900 the State had 111 cities and towns with 1,000 or more inhabitants, against 109 in 1890 and 103 in 1889.

Finances.—The amount of money in the State treasury, Jan. 15, was \$1,014,890.63. The Auditor's report of Aug. 9 showed the aggregate credit balances of the State funds to be \$886,452.03.

The Auditor's compilation of the tax reports was completed in April, and showed that the taxes for all purposes in the State for 1899 amounted to \$15,497,307.86, divided as follows: State tax, \$1,811,114.75; school district, \$4,147,538; township, \$1,601,660.68; county, \$3,718,222.64; city, \$2,014,933.95; railroad, \$2,203,977.84. The assessors' returns for 1900 show an increase in valuation of property in the State of about \$13,500,000. On this basis, owing to the high levy fixed by the last Legislature, about \$80,000 more of taxes would

have been collected than the necessities of the State government required. It was impossible to reduce the levy, but the State Board of Equalization reduced the valuation as returned by the assessors \$11,675,044. The total valuation as returned by the board for 1900 is \$328,936,054, an increase over 1899 of \$1,770,524. The total State tax levied in 1900 was \$1,807,898, an increase over 1899 of \$8,489.

The February apportionment of the State school fund among the counties involved the distribution of \$226,858.50, being 45 cents per capita, and an increase of 4 cents per capita over the August apportionment of 1899.

In the three years from July 1, 1897, to July 1, 1900, the counties of Kansas reduced their bonded debts in the aggregate \$2,928,371, reductions being made in 95 counties and increases in only 10.

The Auditor's statement in June showed the total amount of municipal bonds of the State refunded during the two previous years to have been \$6,232,233.44. The settlements included county, township, city, and school bonds. More than \$500,000 of bonds in addition were paid off. The Auditor's list embraces 89 of the 105 counties. The tax accounts of Harper County have been checked up, with a saving to the State of \$6,103.43.

The twelfth biennial report of the Treasurer, covering the period from June 30, 1898, to June 30, 1900, shows a reduction during that period in delinquent taxes due the State from \$104,831.58 to \$75,815.34. The Treasurer informs the Governor of a considerable amount of bonds in the treasury upon which no interest has been paid for several years, and which were mostly imposed upon honest settlers by professional boomers, who immediately left the State. "When the temporary inflation subsided, the bonded municipalities were left with property greatly depreciated and, in many instances, almost depopulated. This causes great hardship to the worthy people who are endeavoring to establish homes in those localities, and prevents the settlement and development of the bonded Territories."

Although the Attorney-General had held that the Quantrell raid scrip could be turned into the treasury in payment of State taxes, the Treasurer decided not to receive the scrip in such payment, basing his decision on the Titus law (chap. 247, Laws of 1899).

For the period of nine months ending with March, 1900, the net income to the State from the oil-inspection department was \$10,334.01.

In April the Governor was officially advised that

the claims of the State against the Federal Government for expenses incurred in raising troops for the war with Spain had been allowed to the amount of \$36,681.19. The claims aggregated \$37,787.84.

Final payments to the Indians of the Ottawa reservation have been made by the Federal Government, the amount paid being \$42,000, or \$491.48 per capita.

Banks.—According to the biennial report of the State Bank Commissioner, Dec. 13, there were 334 State and 55 private banks in Kansas, 59 banks having been organized during the year. Eleven private banks were reorganized as State banks and 11 State and private banks reorganized as national banks. Twelve State and 5 private banks went into voluntary liquidation, while 5 were closed. In the last two years the capital stock of the State and private banks in the State had increased \$100,023, and the surplus \$468,160. While the deposits in the same length of time increased \$9,000,000, yet the cash on hand was only \$178,099 greater. The total number of depositors was 111,132.

Building and Loan Associations.—By the Legislature of 1899 building and loan associations were placed under the control of the State Bank Commissioner, who in June submitted a report showing the cost of management of local associations to be 1.31 to 8 per cent. of the total receipts from stock sold, and of Kansas national (or "general") associations to be from 18.3 to 80 per cent. Regarding foreign associations, the commissioner says: "The losses sustained by Kansas investors in foreign loan associations in the past aggregate millions of dollars. Eighty per cent. of the foreign associations that were doing business in Kansas five years ago have failed." During the year, when the number of building and loan associations doing active business in the State increased to more than 50, several associations went into voluntary liquidation, and some were closed by the Bank Commissioner.

Education.—At the State University the graduates in 1900 numbered 200, with the following distribution among the various schools: Art, 91; law, 73; engineering, 15; graduate school, 13; fine arts, 6; medicine, 2. In all, the university has graduated 1,745 students. The formal dedication of the Fowler Shops building occurred on June 5.

The graduating class at the Agricultural College had 59 members. The degree of M. S. was conferred upon 3 post-graduates. At the end of the second week of the winter term the increase of attendance over that of the same week in 1899 was 32.1 per cent., the number of students being 888. The agricultural department now has permanent quarters in the fine hall completed in 1900. The chemical building was destroyed by fire in May. In March Congress granted to Kansas the old Fort Hays military reservation in Ellis County for educational purposes. The bill provides for an experiment station of the Agricultural College on this tract.

At the State Normal School the enrollment for the year was 1,983, representing 93 counties in Kansas, and also 14 other States and Territories. The graduating class numbered 109. The Fort Hays grant makes provision for a western branch of this school.

The College of Liberal Arts, Baker University, conferred degrees upon 14 graduates. During the year the university built a new gymnasium.

At Washburn College 27 students were graduated. The thirty-fifth anniversary of the founding of the college was celebrated Feb. 6.

Ottawa University had 500 students during the year, and graduated 7.

The graduates of McPherson College, in all departments, numbered 31. During the year the college debt was liquidated.

The school population of the State in 1900 was 504,130—white persons, 487,953 (males 247,330, females 240,623); colored persons, 16,177 (males 7,895, females 8,282).

Kansas has \$11,665,511 invested in school buildings, of which there are 9,297 in the State. The number of teachers in 1900 was 11,428. The money paid in wages to teachers for the year ending June 30, 1899, amounted to \$3,033,248.40. For the same period the total expenditure for school purposes was \$4,360,472.94. The semiannual distribution of the State school fund in August, 1900, divided among the counties \$221,836.68—about 44 cents per capita for the school population.

According to the statistics of the Federal Department of Education, Kansas has the largest percentage of school children enrolled among the States of the Union.

Charities and Corrections.—In March, 1900, the number of inmates in each of the 8 charitable institutions of Kansas was as follows: School for the Blind, at Kansas City, 84; Imbecile and Idiotic Asylum, at Winfield, 182; Reform School, at Topeka, 171; Deaf and Dumb School, at Olathe, 246; Girls' Industrial School, at Beloit, 112; Soldiers' Orphans' Home, at Atchison, 139; Topeka Insane Asylum, 850; Osawatomie Insane Asylum, 1,025.

Seventy-seven counties own their poor farms. Their total number of inmates, according to the latest report of the Labor Commissioner, was 1,595, and their aggregate expense in 1899, \$135,403.02. Revenues from them amounted to \$32,618.22.

The State Board of Charities in its last report commends the work of the 16 independent charities which receive State aid. The value of their real estate and equipment is about \$500,000. In ten years they have given relief to more than 37,000 persons.

The number of inmates at the State Industrial Reformatory, at Hutchinson, July 1, 1900, was 227. During the first year of the fiscal period 97 inmates were paroled, and during the second year 110.

In the State Penitentiary the prisoners in May numbered 1,000, of whom 215 were from Oklahoma, which has no prison.

The present Governor has made experiments in the matter of conditional pardons for criminals, with results of practical interest. In March, 1900, ten months after his plans were put in operation, he was able to make known that 18 prisoners of the Penitentiary had been conditionally pardoned. "All of them," he says, "are now employed, and their monthly reports show that they have fulfilled the strict letter of their conditions, are caring for those dependent upon them, and are leading industrious and honest lives."

Military.—According to the annual report of the Adjutant General's Office at Washington, issued in July, the organized militia force of Kansas was 1,244. The number of men in the State available for military duty, but unorganized, does not appear in this report.

The twelfth biennial report of the Adjutant General of the State, issued Oct. 8, in addition to other information regarding the department, contains the complete roster and histories of the 4 regiments put in the field by Kansas during the Spanish-American war. At the date of the report there were 1,295 Kansas soldiers in the Philippines. All but 43 of them were in the infantry service.

In May an organization, to be known as the Twentieth Kansas, was formed by the election of officers. Its membership is designed to include all honorably discharged soldiers of the Twentieth

Kansas Infantry. Medals for the members of this regiment have been made from captured Spanish cannon.

In honor of Company K a memorial gateway has been erected at Forest Park, Ottawa, by the citizens of Franklin County.

Calvin P. Titus, of Wichita, a musician of the fourteenth United States Infantry, was the first to scale the walls of Pekin in the assault of the allied forces upon the city in August.

Railroads.—The Auditor, as secretary of the State Board of Railroad Assessors, reports the total assessments of railroad, telegraph, and telephone properties for 1900 as reaching \$59,320,032, an increase over 1899 of \$279,975.

The present railroad mileage of Kansas is about one third that of Germany, almost half that of Great Britain and Ireland, slightly less than that of Spain, and nearly the same as that of Italy. Only 5 of the 105 counties, and only 7 county seats, are without railroad communications.

In April the Kansas Midland Railway, from Wichita to Ellsworth, 106 miles, was sold to the St. Louis and San Francisco Railway Company.

Insurance.—The mutual insurance companies reported no large profits for 1899, while two report loss.

The amount collected by the Superintendent of Insurance for the Firemen's Relief fund, as returned in May, was \$20,140.81.

A form of insurance new in Kansas, which has worked successfully in other States, has been introduced by the organization of the Farmers' Mutual Hail Association, at Topeka.

Products.—According to the final report of the Secretary of the State Board of Agriculture for 1900, the value of the year's crops and products, exclusive of live stock, was \$187,796,406. The value of live stock was \$143,457,753. This makes grand total of \$331,254,159, a net increase over 1899 of \$28,348,780.40, or 9.35 per cent. The acreage of winter wheat sown in 1900 exceeded by 10 per cent. that sown in 1899. The corn crop of 1900 was 90,000,000 bushels short, but the winter wheat crop, 76,595,443 bushels, was the greatest ever grown in Kansas, exceeding that of 1899 by 1,779,972 bushels, and having a home value of \$1,624,096. Of corn, the yield was 134,523,677 bushels, valued at \$39,581,835. Oats yielded 31,169,112 bushels, with a value of \$6,026,443. Notwithstanding the \$13,948,741 shortage in the value of the corn crop, the total value of the year's winter and spring wheat, corn, and oats combined was \$3,182,423, an increase over 1899 of \$7,293,801, or 10 per cent. Other noteworthy productions of the year were: Flax, 1,693,238 bushels, value \$2,201,940; Irish and sweet potatoes, 7,573,962 bushels, value \$2,872,454.46; barley, 3,319,333 bushels, value \$2,358.29; dairy products, value \$7,459,693.46; poultry and eggs sold, value \$5,060,332; animals slaughtered or sold for slaughter, value \$54,321,888; horticultural and garden products and wine, value \$364,927.75. The combined value of sorghum, fir corn, milo maize, and Jerusalem corn forage was \$8,647,507. Sorghum for sirup, 22,963 gallons, was valued at \$551,807.42. Several first prizes were awarded at the Paris Exposition for Kansas fruit exhibits.

Legal Decisions.—In an opinion handed down July 7 by the Supreme Court, the law creating the Court of Visitation, enacted by the Legislature at the special session of 1898-'99, was declared to be unconstitutional and void.

The decision of the court in the Harper County case, rendered in June, affects about half the counties in the State and insures about \$100,000 increase in the State's general revenue fund. The

court's decision is that Harper County and all counties are liable to the State for uncollected State taxes.

The Supreme Court, in reversing the decision of a lower court, declares that "improvements placed upon real estate by a railroad company necessary to the operation of the road are to be regarded as trade fixtures and not accessories of the land to which they are attached."

Another decision of the court is that chapter 167, Laws of 1897, an act to require railroad companies to furnish free transportation to shippers of stock, is unconstitutional and void under the fourteenth amendment of the Federal Constitution.

The Supreme Court of the United States, in January, in a case involving the constitutionality of the Kansas law authorizing cities to extend their borders so as to include some lands and not others, rendered a decision upholding that law.

A suit of long standing for possession of Leavenworth island, in Missouri river, has been decided by a special judge in the circuit court in favor of David Atchison, of Leavenworth. This island, subject to changes of area and outline by the action of the river, now contains about 1,000 acres, and is believed to have valuable coal deposits.

A decision rendered by the Federal Court in May will, if sustained, permit liquor houses outside of the State to sell liquor through their representatives to parties in Kansas, on the ground that such action is allowed by the interstate commerce law. The Attorney-General filed notice of an appeal to the Supreme Court of the United States.

Lawlessness.—At Fort Scott, Jan. 20, a mob hanged two men who had been convicted of murdering a farmer in Bates County, Missouri. A third man, convicted of the same crime, was saved from the hands of the mob by the determined stand of the sheriff and his deputies, aided by some of the less violent among the lynchers. The immediate cause of the lynching was a murderous assault by the prisoners upon a deputy sheriff in an attempt to escape.

A desperate battle took place at Goodland, Aug. 10, between a sheriff and his posse, re-enforced during the struggle by a large party of armed citizens, and two train robbers from Colorado. Two citizens of Goodland were seriously wounded, one of the outlaws was shot to death, and the other was burned in a house where he had taken cover, which was fired by his pursuers.

Labor.—From answers to questions sent to laboring men in nearly every county, the Bureau of Labor and Industry has compiled statistics of comparison between organized and unorganized day laborers. From these it appears that the working day of the organized laborer averages 8.6 hours; of the unorganized, 10.4. Average rate of wages per hour indicated—organized, 16.7 cents; unorganized, 13 cents. Average total wage for 1899—organized, \$293.03; unorganized, \$293.19. Average annual cost of living—organized, \$326; unorganized, \$307.14.

At the second annual convention of the State Society of Labor and Industry, in February, 35 resolutions were adopted calling for as many kinds of special legislation. A legislative committee was appointed. The resolution asking for the passage of an arbitration law declared emphatically against strikes.

Disagreements between the Big-Four coal mining companies and their employees were settled in June through the friendly counsel of the Governor and the Commissioner of Labor.

An interesting feature of the report of the State Labor Commissioner deals with statistics gathered by him, from which it appears that the home

owner supports a family on an average 13.3 per cent. larger than the average family of the rent payer; that the average annual earnings and income of the home owner is 15.5 per cent. more than the average for the rent payer; that the cost of living of the home owners is 10.6 per cent. greater than the average for the rent payer; that the average annual saving of the home owners is 32.3 per cent. more than the average saving of the rent payer; and that of the total amount permanently invested during the year, 80 per cent. is invested by the home owners. The rent payers expend an average of 14.1 per cent. of their earnings and income for rental for homes.

New Temperance Movement.—A Temperance Commission Club was organized at Topeka in March, to work for the creation by law of a State department of temperance under a board of three commissioners. The movement, which aims to secure uniform and practical enforcement of the prohibitory law, has resulted in the organization of similar clubs in different parts of the State. The State Temperance Union, through its committee, reporting on Nov. 28, while recommending further prohibitory legislation, disapproved of the commission project as inexpedient.

Good Roads Congress.—The first gathering of its kind in the West was the Good Roads Congress, held at Topeka in September, which brought together a large number of persons from Kansas and other States. The most important action of the congress was the forming of a permanent State organization to be called the Kansas Good Roads Association. A committee was named to prepare a good roads bill for the Legislature, and delegates were chosen to attend the National Good Roads and allied congresses at Chicago in November.

Kansas Semicentennial Exposition.—On June 14 the State Charter Board granted a charter to the Kansas Exposition Association of Topeka, with a capital stock of \$50,000, divided into 10,000 shares at \$5 each. This is but one of many movements in the State whose special object is the holding of an exposition in 1904 to celebrate the semicentennial of the organization of the Territory of Kansas.

Political.—The Republican State Convention was held at Topeka, May 16. It reaffirmed the principles of the platform of the National Republican party of 1896; approved the administration of President McKinley, and declared that the highest interests of the country demanded its continuance through another term; congratulated the country on the maintenance of the gold standard and the parity of all our forms of money; condemned "the false cry of imperialism," and the Democratic policy based thereon, "as being responsible for the continued war in the Philippines"; denounced the disfranchisement of colored citizens in Southern States, and urged remedial legislation for this injustice by Congress. It demanded "the prompt, efficient, and faithful enforcement of the antitrust act of 1890, and such additional and supplementary legislation as will meet the defects thereof, as indicated by the Supreme Court of the United States in its recent decisions," and denounced "the combination and creation of corporate trusts and monopolies which seek to become the controllers of industry and the arbitrators of prices, as contrary to the common law, destructive of individual effort and enterprise, and inimical to the welfare of the people and the State and the nation." It reaffirmed allegiance to the principles of reciprocity and protection as exemplified in the Dingley law.

The convention commended in the highest terms the administration of Gov. Stanley and his asso-

ciates in the State government; commended representatives of Kansas in Congress; denounced recent fusion railroad legislation in the State, and pledged the Republican party to "such legislation as will provide adequate protection against greed of the corporations without crippling them with unjust exactions." It favored the re-establishment of the Board of Railroad Commissioners with fuller powers, and recommended the election of its members by the people.

Another demand of the convention was for "amendment of the interstate commerce act in such manner that it will compel compliance with enforcement of just and equitable freight rates." Hearty sympathy was expressed with general pension legislation and liberal interpretation of pension laws. The resolutions of the convention concluded with a pledge to work for some measure that will make it possible for railroad men engaged in running their trains on Election Day to cast their votes without embarrassment to their work.

At this convention the Republicans chose delegates at large to the national convention and presidential electors, and nominated Charles F. Smith for Congressman at Large and the following State ticket: Associate Justice, W. A. Johnston; Governor, W. E. Stanley; Lieutenant Governor, H. Richter; Secretary of State, George A. Clark; Treasurer, Frank Grimes; Attorney-General, A. Godard; Auditor, George E. Cole; Superintendent of Public Instruction, Frank Nelson; Superintendent of Insurance, W. V. Church.

The State convention of the People's party choose national delegates was held at Clay Center April 24.

The Democratic State Convention to choose national delegates met at Wichita, May 23.

The Prohibition party held its State convention at Topeka, June 20. The usual resolutions on prohibition and one favoring woman suffrage were passed, also resolutions against trusts and army canteen.

Candidates for presidential electors were chosen. B. C. Hoyt was nominated for Congressman at Large, and candidates for State offices were named as follow: Governor, Frank Holsinger; Lieutenant Governor, W. L. Coryell; Secretary of State, R. Moore; Treasurer, H. C. Zink; Attorney-General, M. V. Bennett; Auditor, W. M. Howie; Superintendent of Insurance, A. H. Griesa; Superintendent of Public Instruction, G. I. Winans.

The State conventions of the Democratic, People's, and Silver-Republican parties, all assembled at Fort Scott, July 24, effected a fusion, and chose candidates for presidential electors, and nominated Jerry Botkin (People's party) for Congressman at Large, and these candidates for State offices: Associate Justice, David Martin, Silver Republican; Governor, John W. Breidenthal, People's party; Lieutenant Governor, A. M. Harvey, People's party; Attorney-General, Hugh P. Farrell, Democrat; Secretary of State, Abraham Frank, Democrat; Auditor, E. J. Westgate, People's party; Treasurer, Conway Marshall, Democrat; Superintendent of Public Instruction, Levi Hubbard, People's party; Superintendent of Insurance, Webb McNall, Silver Republican.

The platform of the People's party reaffirmed its declaration of principles made by the national convention at Sioux Falls, S. D., May 9, 1900, and accepted its nominees; invited comparison between the last administration of the People's party in the State and preceding and succeeding Republican administrations, "believing that such comparison will everywhere inure to the credit of Populists"; denounced militarism and imperialism

the direct outgrowth of the spirit of greed which is the chief characteristic of modern commercialism as embodied in trusts and private monopolies; declared that there is no affinity between political democracy and commercial aristocracy, and proclaimed unalterable opposition "to absolutism, whether practiced upon the people of this nation by imperial commercial trusts and private monopolistic corporations or whether practiced upon political subjects either of Queen Victoria in South Africa or of William McKinley in Porto Rico and the Philippines." The platform favored the election of United States Senators by a direct vote of the people; denounced the illiberal and unjust administration of the Pension Bureau; demanded that the initiative and referendum be embodied in the State Constitution; criticised Republican action with respect to railroad legislation, and appealed for Government ownership of railroads as the only means of permanent relief from evils of their present management. Demanding the withdrawal of all special privileges granted by law to corporations or individuals and the application of the principle of Government ownership as a remedy for monopolies of every kind, the platform specifically favored "the municipal ownership and operation of plants for the supply of water, light, heat, and power, and also of all street-car lines and telephone systems."

An amendment of the State Constitution permitting State stock yards and markets and providing for State insurance was favored, as also was state development of oil resources and refining. Other features of the platform were the condemning of the combination of grain buyers existing in violation of the Kansas antitrust law; a demand for an amendment to the State banking laws which will provide for taxing the banks to create a fund for reimbursing depositors in banks that become insolvent; the favoring of a civil service that will allow the State institutions upon a business basis; additional penalties for violation of the tax law; the graduated taxation of property, incomes, and inheritances; and of such laws, State and national, as will prevent abuse of the power of federal judges by means of the writ of injunction and otherwise, so that the right of trial by jury shall remain inviolate, and "no matter with what offense a man may be charged, he will at all times be assured a fair and impartial trial."

At the general election of Nov. 6 the Republicans were successful with their State and national tickets. Gov. Stanley was re-elected by a majority of 100, and the rest of the State ticket by majorities averaging somewhat higher. The election gave the Republicans a majority of 59 on joint ballot in the Legislature.

The constitutional amendment increasing the membership of the Supreme Court from 3 justices to 7 was carried by 123,721 to 35,474. By this amendment the Appellate Court, with 6 justices, ceases to exist.

Of the presidential vote McKinley received 59,555; Bryan, 162,601; Woolley, 3,605; Debs, 1,055. McKinley's plurality, 23,349; majority over Bryan, 18,139.

KENTUCKY, a Southern State, admitted to the Union June 1, 1792; area, 44,400 square miles. The population, according to each decennial census since admission, was 220,955 in 1800; 406,511 in 1810; 564,135 in 1820; 687,917 in 1830; 779,828 in 1840; 982,405 in 1850; 1,155,684 in 1860; 1,321,011 in 1870; 1,648,690 in 1880; 1,858,635 in 1890; and 2,147,174 in 1900. Capital, Frankfort.

Government.—At the beginning of the year 1900 the offices were filled by the Republicans who were inaugurated in December, 1899, after the official

count had been declared. They were: Governor, William S. Taylor; Lieutenant Governor, John Marshall; Secretary of State, Caleb Powers; Attorney-General, Clifton J. Pratt; Auditor, John S. Sweeney; Treasurer, Walter R. Day; Superintendent of Instruction, John Burke; Commissioner of Agriculture, J. W. Throckmorton. The Democratic candidates for the offices of Governor and Lieutenant Governor made a contest before the Legislature, which decided in their favor; appeal was taken to the courts, where it was decided that they had no jurisdiction. The following were therefore declared to be the rightful claimants to the offices: Governor, William Goebel, who died Feb. 3 and was succeeded by the Lieutenant Governor, J. C. W. Beckham; the president *pro tem.* of the Senate, Lillard H. Carter, became the acting Lieutenant Governor. The contestants for the minor offices were: Secretary of State, Breck Hill; Attorney-General, R. J. Breckenridge; Treasurer, S. W. Hager; Auditor, G. C. Coulter; Commissioner of Agriculture, J. B. Nall; Superintendent of Public Instruction, H. V. McChesney. The Railroad Commissioners were J. F. Dempsey, C. C. McChord, and John C. Wood; the State Inspector, Henry B. Hines. Gov. Goebel appointed John B. Castleman to succeed D. R. Collier as Adjutant General. The Chief Justice of the Court of Appeals was James H. Hazelrigg, Democrat; the Associate Justices, J. D. White, T. H. Paynter, and J. P. Hobson, Democrats, and B. L. D. Guffy, George DuRelle, and A. Rollins Burnam, Republicans; Clerk, S. J. Shackelford, Democrat.

Elections for State officers are held in November of the years preceding the presidential elections. The term of office is four years. The Legislature, consisting of 38 Senators and 100 Representatives, meets biennially the first Tuesday after the first Monday of January in even-numbered years.

Population.—The population of the State, by the census of this year, 2,147,174, is made up by counties as follows: Adair, 14,888; Allen, 14,657; Anderson, 10,051; Ballard, 10,761; Barren, 23,197; Bath, 14,734; Bell, 15,701; Boone, 11,170; Bourbon, 18,069; Boyd, 18,834; Boyle, 13,817; Bracken, 12,137; Breathitt, 14,322; Breckenridge, 20,534; Bullitt, 9,602; Butler, 15,896; Caldwell, 14,510; Calloway, 17,633; Campbell, 54,223; Carlisle, 10,195; Carroll, 9,825; Carter, 20,223; Casey, 15,144; Christian, 37,962; Clark, 16,694; Clay, 15,364; Clinton, 7,871; Crittenden, 15,191; Edmonson, 10,080; Elliott, 10,387; Estill, 11,669; Fayette, 42,071; Fleming, 17,074; Floyd, 15,552; Franklin, 20,852; Fulton, 11,546; Gallatin, 5,163; Garrard, 12,142; Grant, 13,239; Graves, 33,204; Grayson, 19,878; Green, 12,255; Greenup, 15,432; Hancock, 8,014; Hardin, 22,937; Harlan, 9,838; Harrison, 18,570; Hart, 18,390; Henderson, 32,907; Henry, 14,620; Hickman, 11,745; Hopkins, 30,995; Jackson, 10,561; Jefferson, 232,540; Jessamine, 11,025; Johnson, 13,730; Kenton, 63,591; Knott, 8,704; Knox, 17,372; Larue, 10,764; Laurel, 17,592; Lawrence, 19,612; Lee, 7,988; Leslie, 6,753; Letcher, 9,172; Lewis, 17,863; Lincoln, 17,059; Livingston, 11,354; Logan, 25,994; Lyon, 9,319; McCracken, 28,733; McLean, 12,448; Madison, 25,607; Magoffin, 12,006; Marion, 10,290; Marshall, 13,692; Martin, 7,580; Mason, 20,446; Meade, 10,533; Menifee, 6,818; Mercer, 14,426; Metcalfe, 9,988; Monroe, 13,053; Montgomery, 12,834; Morgan, 12,792; Muhlenberg, 20,741; Nelson, 16,587; Nicholas, 11,952; Ohio, 27,287; Oldham, 7,078; Owen, 17,553; Owsley, 6,874; Pendleton, 14,947; Perry, 8,276; Pike, 22,686; Powell, 6,443; Pulaski, 31,293; Robertson, 4,900; Rockcastle, 12,416; Rowan, 8,277; Russell, 9,695; Scott, 18,176; Shelby, 18,340; Simpson, 11,624; Spencer, 7,406; Taylor, 11,075;

Todd, 17,371; Trigg, 14,073; Trimble, 7,272; Union, 21,326; Warren, 29,970; Washington, 14,182; Wayne, 14,892; Webster, 20,097; Whitley, 25,015; Wolfe, 8,764; Woodford, 13,134; total, 2,147,174. The population of Louisville is 204,731; Covington, 42,938; Lexington, 26,369.

Of those having smaller population are: Paducah, 19,446; Owensboro, 13,189; Henderson, 10,272; Frankfort, 9,487; Bowling Green, 8,226; Hopkinsville, 7,280; Ashland, 6,800; Maysville, 6,423; Bellevue, 6,332; Dayton, 6,104; Winchester, 5,594.

Finances.—The bonded indebtedness of the State at the opening of the year was \$3,483,091. Of this only \$1,000,000 must be ultimately discharged by payment of the principal—in 1905 and 1907—and the resources of the treasury were more than sufficient to discharge them. A small part, \$6,394, was in old issues supposed to be lost, and the remainder was educational, college, and normal school bonds. The floating debt was \$23,276. The total value of taxable property in the State, as reported by the Board of Equalization in July, is \$574,867,964; this will produce \$2,730,622 in taxes at 47.5 on \$100, the rate this year, instead of 52.5 cents, which has been collected for the past three years. Owing to the failure of county assessors to make the assessment, about \$12,000,000 worth of stock in national banks escaped taxation this year, the decision of the Supreme Court making it the duty of the owner of the stock to list it for taxation. The board in November fixed the tax valuation of whisky at \$10 a barrel instead of \$7 as heretofore.

Education.—The school population is 719,654; the per capita of apportionment for the year ending June 30, 1900, was \$2.70; this is larger than for the previous year, as the school fund was increased in consequence of the collection of large amounts of bank taxes from railroads and other sources after the per capita for the year ending June 30, 1899, had been fixed. The most serious defect of the school system is the limited term of instruction, the schools in rural districts being open not usually more than five months of the year.

Charities and Corrections.—There are three insane asylums—the Eastern, the Western, and the Central. New buildings have been erected for the Institute for the Feeble-minded.

The penitentiaries, at Frankfort and Eddyville, are under the care of three prison commissioners, who receive salaries of \$2,000 each. There is also an institution for juvenile offenders near Lexington. For the sixteen months ending Nov. 30, 1899, the expenses of the Frankfort penitentiary were \$349,623, and its income from earnings, etc., \$261,851. The amount paid and charged to the Eddyville penitentiary during the same period was \$91,469.83, an amount greater by \$57,075.83 than the amount of earnings and materials on hand.

Lawlessness.—A feud dating from the time when Kentucky troops were at Anniston, Ala., during the Spanish war, between Col. D. G. Colson and Lieut. Ethelbert Scott, resulted in a tragedy at Frankfort, Jan. 16, in which three persons were killed and four others wounded. While the officers were at Anniston they had an encounter, in which Colson was wounded by Scott. The encounter of Jan. 16 resulted fatally for Scott. It took place in the lobby of the Capitol Hotel, which was crowded with visitors drawn to Frankfort by the legislative contests. The accounts of the beginning of the fray are conflicting, but the first fire was instantly returned; and when Scott retreated to the stairway Colson pursued him and fired at him as he ran down the stairs. Scott was wounded in six places, and died almost instantly. Two

bystanders also were killed, one of whom Scott was said to have used as a shield from Colson's first bullets. Colson was indicted, tried, and acquitted.

Five men were killed in quarrels over politics, Nov. 6.

Osteopathy.—A graduate of a school of osteopathy asked an injunction restraining the State Board of Health from interfering with his practice. The lower court refused, but the Court of Appeals granted the injunction, and held that the practice is not a violation of the statutes, the Chief Justice dissenting.

The Contest for Offices.—The official count after the State election of 1899 gave the offices to the Republican candidates, and they were inaugurated Dec. 12. Notices of contest were served. The contests for the two higher offices came before the Legislature, according to the election law; those for the remaining offices were to come before the Election Board sitting as a board of contest. Two members of this board resigned before the time for hearing the contests, and each of the contestants for the office of Governor made appointments to fill the vacancies.

In the Legislature the Committee on Contests was chosen by lot, according to the law of 1899. The drawing fell out greatly to the advantage of the Democrats, and unfairness in the drawing was charged. On Jan. 25, according to Frankfort dispatches, a special train arrived there, bringing from 500 to 1,000 men armed with Winchester rifles, the so-called "mountain men" from the southeastern and southern parts of the State, many of whom were said to belong to the State militia, but this was denied. They held a meeting and adopted a petition to the Legislature in the form of resolutions, asking that the contest be decided according to the will of the people expressed at the polls. A dispatch of the evening of that day said they had returned to their homes.

A contest for a seat in the House was decided, Jan. 27, in favor of Van Meter, the Democrat, against Berry, the Republican; and this decision was regarded as forecasting the vote on the governorship. The House stood 60 Democrats to 40 Republicans, and the Senate 26 Democrats to 12 Republicans.

While on his way to the Statehouse, Jan. 30, Senator William Goebel fell by a shot from an assassin. Great excitement prevailed, and Gov. Taylor adjourned the Legislature (see Legislative Sessions in this article), declaring that a state of insurrection existed, and placed military guards around the Capitol. He called the Legislature to meet at London, which is in the Republican part of the State. Jan. 31, the legislators favorable to Senator Goebel, unable to enter the Capitol to hold a session, and also shut out by militia from the opera house and other places where they attempted to meet, prepared a statement setting forth these facts and declaring Goebel and Beckham Governor and Lieutenant Governor. This was signed by 19 Senators and 56 Representatives. Mr. Goebel's death was hourly expected, but he was sworn in as Governor in the evening, Chief-Justice Hazelrigg holding that the action of the members was valid, and Mr. Beckham took the oath as Lieutenant Governor. Gov. Goebel died Feb. 3, and Mr. Beckham was sworn in Governor an hour later.

It was held that the law called for the decision of such a contest by the two houses separately. The Republicans refused to abide by this decision or to give up the offices. Applications for injunctions were made by both sides; a conference committee consisting of 7 men from each party pre-

pared an agreement by which, if the Legislature should ratify their action, the Republicans should submit without further protest; that all parties should unite in an effort to bring about such changes in the laws as would secure free and fair elections; that the troops should be removed from the Capitol; and that the Republican officials and officers of the State Guard should have immunity from charges of treason, usurpation, or any such offenses. This agreement Gov. Taylor refused to sign; the injunction suits were consolidated into one, and it was agreed that both parties would abide by the decision of the courts. The case was carried to the circuit court of Jefferson County, where a decision was given, March 10, sustaining the contention of the Democrats that the Legislature is, under the Constitution, the proper tribunal for the settlement of such contests, and that, although the Legislature was not in session, the showing of the records that the reports in favor of the Democratic contestants were adopted by a quorum of each house was sufficient. Appeal was taken to the State Court of Appeals, where the decision was affirmed; and lastly the Republicans carried the case to the United States Supreme Court, where judgment was given, May 21, that that court had no jurisdiction, Justices Brewer, Brown, and McKenna dissenting from portions of the opinion, and Justice Harlan from the whole. He said in part: "So that, while we may inquire whether the citizen's land or his mule have been taken from him by the legislative, executive, or judicial authorities of his State without due process of law, we may not inquire whether the legislative or judicial authorities of the State have, without due process of law, ousted one lawfully elected and holding the office of Governor for a fixed term, and put into his place one whom the people have said should not exercise the authority pertaining to that high position. When the fourteenth Amendment forbade any State from depriving any person of life, liberty, or property without due process of law, I had supposed that the purpose was to guard citizens against being deprived of any legal right in violation of the fundamental guarantees that adhere in due process of law."

As soon as the decision was made known, Gov. Taylor directed D. R. Collier, Adjutant General, to dismiss the militia from the Capitol and surrender his office to Mr. Beckham's appointee as soon as the mandate of the court should be filed. **The Goebel Murder Trials.**—The Legislature offered a reward of \$100,000 for the apprehension and prosecution of the assassin of William Goebel, and warrants were issued for men suspected of complicity. On March 10 Gov. Taylor issued pardons to these men. The pardon to John L. Powers was respected in Barbourville and at Harlan courthouse, where he was arrested, but the power of the ex-Governor to grant pardons was not generally recognized, as the Legislature had not decided against his claim to the office. Executions of the suspected men were held at Frankfort, and the grand jury returned indictments against ten. The principals named were: Henry E. Youtsey, who was a clerk in the office of Auditor Sweeney; James and Berry Howard, business known in connection with the old Howard and; Holland Whittaker, who was alleged to have been in the room in the executive building from which the shot was fired, and "Tallow Dick" Combs, a colored man who went to the Capitol with the "mountain men." Those indicted as accessories before the fact were: Caleb Powers, the publican Secretary of State, and his brother, John L. Powers; Charles Finley, Secretary of

State in Gov. Bradley's administration; W. H. Culton, a clerk in Auditor Sweeney's office; and F. Wharton Golden, a member of the State Guard. Finley went to Indianapolis just before the warrant for him was issued. An indictment against Gov. Taylor, who, together with Green Golden and John W. Davis, special policeman at the Capitol, was mentioned in the indictment of the other accessories, was found by the grand jury about the same time, but was not made public till about June 1.

Requisition was made on the Governor of Indiana for the return of Taylor and Finley, but he refused to honor it, saying in his letter: "I deplore the assassination of the late William Goebel, and would not for a moment refuse to return Mr. Taylor or any other man charged with complicity in that crime if I could persuade myself that the party so charged, under existing conditions, would be accorded a fair trial. I do not believe a fair and impartial trial can or will at this time be given Mr. Taylor. When Judge Cantrill, of the trial court at Frankfort, declares that he would not subject a sheep-killing dog to a trial under such circumstances as exist, may I not justly refuse to send Mr. Taylor back to be subjected to a trial with this prejudice intensified and fanned into hate? When a man who is a controlling spirit in the prosecution, witness in this case and prominent in its counsels, uses the monstrous language that when they should get control they would hang Republicans 'like pigs to a pole' (and the anarchistic words have not to my knowledge been denied), the question of guilt seems of little consequence in this conspiracy against innocent men, the furtherance of which is indicated by indictments found by a partisan grand jury. Upon such finding is based the requisition papers which I now refuse to honor. I regret the fact that the peace of your State is marred by bitter political strife. When partisan rapacity leads to acts that endanger liberty and jeopardize life, it is time to remedy the cause by reforming the evil instead of persecuting the wronged. Of the law that has caused this strife in your State, while its passage was pending, the Louisville Courier-Journal said: 'The Goebel bill will never be enacted into a law. The Democrats of Kentucky have not sunk so low as that. There is a limit even to the fury of factional passion. There are bounds set upon the prosperous rapacity of sectional leadership.' It seems that this prophecy was not fulfilled and the 'limit even to the fury of factional passion' did not find its bounds in the 'prosperous rapacity of sectional leadership.' This bill thus denounced was enacted into law, and under its iniquitous provisions the people of Kentucky were deprived of their will expressed at the ballot box."

A change of venue for the trials was granted, and that of Caleb Powers began at Georgetown, July 9. Several of the principal witnesses for the prosecution were among those accused of having been in the plot—F. Wharton Golden, W. H. Culton, Robert Noakes. Their testimony was to the effect that the "mountain men" that went to the capital were brought there at the instance of Powers and others; that they were to start a riot in the legislative chambers and kill Democrats enough to leave the Republicans in a majority; that this plan was given up, and that it was decided instead to have Mr. Goebel shot from the office of the Secretary of State. Powers admitted that he organized the mountaineers, but said that he brought them to Frankfort to petition the Legislature, not to intimidate or to commit crime. On Aug. 18 a verdict of guilty was rendered against Powers, with the punishment fixed at im-

prisonment for life. The sentence was "hard labor for life." The jury was composed of 11 Democrats, 3 of whom were opposed to the Goebel faction, and 1 Republican. A motion for a new trial was overruled by Judge Cantrill, Aug. 24. James Howard was tried in September. The prosecution endeavored to show that he fired the shot that killed Senator Goebel. The jury in the case reported, Sept. 25, that they were unable to reach a verdict. The judge sent them back for further deliberation, and the next day they gave a verdict finding him guilty and fixing the death penalty. It was explained that the jury were agreed at the first ballot on the verdict of guilty, the disagreement being on the question of punishment. There was 1 Republican on this jury and there were 11 Democrats, 2 of whom were of the anti-Goebel faction. Henry E. Youtsey's trial was called Oct. 2, but it was delayed somewhat by the illness and apparently demented condition of the defendant. Testimony was introduced by the defense to show that Golden had said he was to get \$5,000 for his evidence, and that if he could see Col. Campbell he could get \$10,000, and that Cul-ton had said he had a contract for immunity, and that Golden had "got them all into trouble because he wanted a part of the \$100,000." Oct. 20 the jury brought in a verdict of guilty, fixing the punishment at imprisonment for life. The defense filed a motion for arrest of judgment, and the second day of the February term was set for the hearing.

Legislative Sessions.—The Legislature met for its regular session Jan. 2, and the final adjournment was taken March 13. An incident at the opening of the session is given as follows: "In the Senate caucus Senator Harrel created a sensation by declaring that he had been approached by J. H. Whallen, of Louisville, an anti-Goebel leader, and paid \$4,500 to remain out of the caucus. The money, he said, had been placed in a box with the Louisville Trust Company, the key to which he passed up to Senator Goebel, who was presiding over the caucus. Harrel concluded by declaring that he had entered into the deal for the purpose of exposing Whallen, and further that there was not money enough in the world to make him disloyal to his party and his State." The matter went to the grand jury. J. H. Whallen and C. H. Ryan were indicted for attempt at bribery. An indictment was afterward found against Mr. Harrel for obtaining money on false pretenses. It was asserted that Harrel made the first advances, representing that he was possessed of evidence that would stop the contest, and would use it for the consideration named; and an agreement to that effect was exhibited, signed by the parties to the contract. Whallen declared there was no question of Harrel's vote.

Senator Goebel was elected president *pro tem.* of the Senate, and South Trimble Speaker of the House, by the vote of 58 Democrats against 42 Republicans.

The Governor submitted a message giving reasons for the repeal of the Goebel election law, which he called the "infamy of 1898 that had demoralized, disturbed, and disgraced the State." He recited at length how many citizens he believed had been disfranchised, and declared that even after the ballots were cast there was injustice in counting the votes and in making the returns. He pointed out the great danger to the commonwealth of having all the power at elections vested in any one party to the exclusion of all other parties. The Governor recommended a new State Capitol, a stringent law against lynching and all mob violence, prohibition of the use as well

as the sale of cigarettes, and a separate prison for women.

Notices of contest for the offices of Governor and Lieutenant Governor were served in behalf of the Democratic candidates in the election of 1898. Nine grounds of contest were named in the notices as follow:

1. Alleged use of tissue ballots in 40 counties.
2. Military interference with the election, and intimidation of voters in Jefferson County troops under orders and personal command of Gov. Bradley.
3. Alleged unlawful issuance of mandatory injunctions by Judge Toney in Louisville on Election Day by which election officers were compelled to sign false returns.
4. Intimidation of railroad employees by election officers of the Louisville and Nashville Railroad in several counties.
5. That the leaders of the Republican party corruptly entered into a conspiracy with the Louisville and Nashville Railroad, the American Bond Trust, and other corporations and trusts, by which these corporations furnished large sums of money for the purpose of defeating the contestant.
6. Alleged unlawful issuance of mandatory injunctions in Knox and Lewis Counties, compelling county election boards to certify to false returns.
7. Alleged interference of United States marshals in the elections which was the result of a conspiracy between the marshals and the Republican leaders to intimidate the voters.
8. That before the meeting of State election commissioners, Dec. 4, the Louisville and Nashville Railroad, through its paid agent, John H. Whallen, entered into a conspiracy with the Republican leaders to bring to the State Capitol large bodies of desperadoes to intimidate and overawe the election commissioners into giving the certificates of election to the Republican candidates; that Governor Bradley had here for like purposes soldiers in civilian's clothing, etc.
9. That the Jefferson County election commissioners were forced through threats of personal violence and incendiarism, inspired by the Louisville and Nashville Railroad, to sign returns which were not true.

The notice asserted that any one of the grounds was sufficient to change the result of election.

J. S. C. Blackburn was the choice of the Democratic caucus as the successor of Senator Lindwell in the United States Senate. William O. Bradley was the nominee of the Republican members. Blackburn was elected by a vote of 79 to 54.

According to a law of 1898, committees to the gubernatorial contests were chosen by lot. The Clerk of the House was accused of manipulating the names, placing those of Democrats in one column and drawing from that end or having them drawn. Ten of the eleven members of the committee on the contest for Governor and nine of the eleven on Lieutenant Governor were favorable to the Democratic contestants, according to newspaper statements. "In the drawing over the formation of the legislative contested election committees the results were somewhat more evenly divided. In the case of the two senatorial contests the Republicans got only one member out of nine of each committee, but in the House they got majorities of ten out of eighteen committees to the contests."

The former rules were amended so that the committees on the contest might be called upon to report at any time by the Committee on Rules.

After the assassination of Senator Goebel, Governor Taylor issued the following address:

"To the People of Kentucky:

"The most lamentable condition of affairs ever experienced by our people has rendered prompt action on the part of the chief executive of the State absolutely necessary. A long series of unprecedented and unlawful acts practiced by those in charge of the legislative interests of the State has culminated in the most fearful condition of the period to the State. The dreadful tragedy which occurred yesterday shocked and startled all, and can be no more sincerely deplored by any one than myself.

"To attempt to legislate under such conditions of excitement and threatened violence as now prevail in Frankfort would be sheer madness, and I have therefore, in the exercise of my constitutional powers, adjourned the Legislature to convene in London, Ky., on Feb. 6.

"I have taken every precaution to preserve the peace, that every citizen may know that life and property are safe and will be protected with every resource of the commonwealth. I trust that in this laudable effort I will have the support of every law-abiding citizen of Kentucky.

"W. S. TAYLOR, Governor of Kentucky."

The First and Second Regiments of militia were called to Frankfort. They guarded the Capitol, preventing legislators and others from entering, and were stationed about other buildings. The Democratic members, who, of course, did not go to London, being refused admittance to the Capitol, went to the opera house with no better success, and to the courthouse; prevented from entering there, they went to the Capitol Hotel, but were told that "any meeting they might attempt to hold in the building would be suppressed, all taking part in it would be arrested, and the hotel occupied by soldiers."

As soon as Gov. Goebel was declared, he ordered the militia to disperse and return to their homes; he also issued an order dismissing Adjutant-General Collier and appointing John B. Castleman in his place.

The Republican members met in London. B. J. Bethurum was their Speaker. In regard to the compromise proposed at Louisville, they sent the following dispatch to Gov. Taylor: "Make no compromise of our rights under the Constitution and the laws. We represent the people of this commonwealth for a free election and a fair count. An attempt on the part of any man or set of men to set aside the result of the last election by force, fraud, or vicious legislation without the consent of the people is treason. We therefore pledge you our support and lives if you will but stand by the election returns as counted by the electoral commission. All members agree to this."

The Democratic members afterward met in Louisville. About Feb. 12 Gov. Taylor judged the capital to be safe from the threatened insurrection, and adjourned the Legislature to the Statehouse. The Democratic members adjourned to meet there, Feb. 19. The contest for the gubernatorial offices being still before the courts, Lieut.-Gov. Marshall aimed to be the presiding officer of the Senate by virtue of his office, while the Democrats had chosen Senator Carter president *pro tem.*, and acknowledged him as presiding officer. The two sections of the Senate, therefore, held each to its own organization, and continued to do so until the final adjournment. They met each day in the chamber, and the two claimants to the chair sat side by side upon the platform and called the body to order. The Republicans, having no quorum, simply answered to the call and then adjourned from day to day. The proceedings in the double

Senate, Feb. 19, are described in a dispatch of that date:

"Senator Carter directed the clerk to read the journal, while Mr. Marshall directed Rev. Dr. Dorsie of the Christian church to pray. Dr. Dorsie was quicker than the clerk and he began his prayer before the clerk had a chance to read.

"It is the custom in the Kentucky Legislature for the members to rise when prayer is being offered. The Democrats all kept their seats and Senator Carter sat down while the Republicans all stood up. The moment Dr. Dorsie had finished, the clerk was at it and the Lieutenant Governor was asking if there was any business before the Senate."

During the session in Louisville a resolution was passed in the House, by a vote of 45 to 8, to invite "the ministers of the city of Louisville of every denomination 'who had not engaged in the unjust and unholy crusade against the late Gov. Goebel' to open the proceedings each day with prayer."

After the proceedings in the Senate on the opening day the pastors of the two Presbyterian, the Christian, the Catholic, and the Episcopal churches sent in the following communication:

"To the Legislature of the State of Kentucky:

"The pastors of the churches of the city of Frankfort having been invited by your honorable body to open your sessions with prayer, and one of our number having had his services ignored when he presented himself in regular course at to-day's sessions, we must hereby respectfully decline to longer officiate as chaplains."

Upon this the following resolution was adopted:

"Whereas, no such indignity as that mentioned was ever intended to any of said ministers; and whereas, no such indignity was ever committed so far as known to any member of this body; now be it resolved by the Senate of Kentucky, that this body regrets that any minister of the Gospel feels that he had been so treated by this body; and be it further resolved, that Rev. T. F. Taliaferro, of Frankfort, be, and he is hereby, invited to attend and open the sessions of the Senate with prayer."

A joint session was held Feb. 20 to ratify the proceedings of the Democratic members in regard to the gubernatorial contests. The Republican members did not attend. The resolution of ratification was passed by a vote of 74 to 2.

Among the measures of the session was the so-called "McChord" railroad bill, authorizing the Railroad Commission to fix the maximum of freight rates, and to punish for discrimination and extortion. It has been declared unconstitutional by the United States district court.

Another act provides that the Board of Prisons Commissioners may parole convicts in the Penitentiary for the first time. Paroled prisoners are not required to remain in the State, but if they do so they are required to report their place of residence and conduct to the Board of Prison Commissioners through the county judge at least every six months.

A resolution was passed appropriating \$100,000 for reorganizing and equipping the militia and recovering the arms and munitions of war supposed to have been taken from the arsenal and carried to London. The money was to be expended under the direction of Gov. Beckham.

Another resolution was for the appointment of a joint committee to consider amendments to the election law, and report to an extraordinary session, if such should be called.

An appropriation of \$80,000 was made for improvements at the Agricultural and Mechanical College.

Among other measures were:

Making it a felony for corporations to contribute to campaign funds.

To prevent the adulteration of food.

Allowing the establishment of free libraries in cities of the second class.

Allowing the pensioning of indigent firemen in cities.

Prohibiting railroad companies from transporting persons having the intention of intimidating State officers in the discharge of their duty.

Offering a reward of \$100,000 for the apprehension and conviction of the assassin of Gov. Goebel, and providing for a commission to have charge of it.

Gov. Beckham called an extraordinary session of the Legislature to meet Aug. 28. The only subject named for consideration was "the modification or amendment of the existing laws regulating elections in this State." In his message the Governor said:

"I consider that some changes in our election laws at the present time would be productive of much good and would remove some of the unfortunate bitterness and dissatisfaction that now exists among our people. The present laws on the subject are undoubtedly distasteful to a large number of people in the State, and their amendment is earnestly desired by all those who want to relieve as much as possible the friction and ill feeling engendered by hostile political factions. I do not believe the present law in its operation to have been unfair or unjust, and I know it to have been passed with the earnest and honest intention to remedy the evils which existed under the system which it supplanted. It was a great improvement upon that system, but by reason of a strong prejudice against it many people have been led to believe that the change was a mistake and the law a bad one. This prejudice against it, whether reasonable or not, is sufficient to justify your consideration and warrant you to take some action in securing a more satisfactory law."

Various election bills were offered, but none was passed until Oct. 20, when one reported by a conference committee was made a law by vote of a large majority, and was signed by the Governor, Oct. 24. It provides for a State board of two election commissioners appointed by the Governor, one from each of the two parties that polled the largest number of votes at the last preceding election, the appointments to be made in July. The clerk of the Court of Appeals is to be a third member, to preside at the meetings and give the casting vote when the others disagree. This State board in August is to appoint two commissioners to constitute an election board in each county, with the sheriff of the county to preside and vote in cases of disagreement; the two commissioners are to be one from each party. The county board is to appoint, not later than Sept. 20, the precinct officers, likewise equally from the two parties. "When the election of a Governor or Lieutenant Governor is contested, a board for determining the contest shall be formed in the manner following: 1. On the third day after the organization of the General Assembly which meets next after the election the Senate shall select, by lot, three of its members, and the House of Representatives shall select, by lot, eight of its members, and the eleven so selected shall constitute a board, seven of whom shall have power to act. 2. In making the selection, by lot, the name of each member present shall be written on a separate piece of

paper, every such piece being as nearly similar to the other as may be. Each piece shall be rolled up, so that the names thereon can not be seen, nor any particular piece ascertained or selected by feeling. The whole, so prepared, shall be placed by the clerk in a box on his table, and after it has been well shaken and the papers therein well intermixed the clerk shall draw out one paper, which shall be opened and read aloud by the presiding officer, and so on until the required number is obtained. No decision shall be made but by the vote of six members. The decision of the board shall not be final or conclusive. Such decision shall be reported to the two houses of the General Assembly in joint session for the further action of the General Assembly, over which the Speaker of the House shall preside, and the General Assembly shall then determine such contest. In cases of contests for minor offices, where there is no provision by law for determining the contested election, the contest shall be made by the filing of a petition in the circuit court of the county where the contestee resides, except where the officer is one elective by the voters of the whole State, in which event the petition shall be filed in the Franklin circuit court. Either party may appeal from the judgment of the circuit court to the Court of Appeals." This law did not go into effect before the election of 1900, since the appointments must be made in July, August, and September.

The session adjourned Oct. 22.

Political.—An election to fill the office of Governor, made vacant by the death of William Goebel, was held at the time of the presidential election in November. Republicans held a convention May 17 to choose delegates to the national convention and electors. The delegates—W. S. Taylor, W. O. Bradley, George Denny, and W. A. Gaines—were instructed to vote for William McKinley. On State issues the platform said:

"We demand the unconditional repeal of the existing election law, under the operation of which individual citizens have been denied the right to vote and whole counties have been deliberately disfranchised, by authority of which certificates of election have been issued to men defeated at the polls, and as a disastrous result of which the government of the State has become involved in hopeless confusion and chaos. We demand the prompt enactment, in place of this revolutionary statute, of an election law that shall absolutely secure to every voter the free exercise of the right of suffrage and that shall guarantee the restoration and permanence of government by the people.

"We denounce the course of the Democratic majority in the last General Assembly from the hour when it adopted rules in defiance of right and the Constitution, down to the final action by which it attempted to deprive Gov. Taylor and Lieut.-Gov. Marshall of the high offices to which they had been elected at the polls."

At the convention, July 17, John W. Yerkes was nominated for Governor. The resolutions said, in part: "Officials elected by the people at the polls have been denied their offices, and the people of Kentucky deprived of the right of choosing their State officials. Republican members of the Legislature were unlawfully unseated, the city of Louisville deprived of the right to any part in the conduct of the government, the counties of Johnson, Magoffin, and Martin have been denied all voice in the choice of our officers, and the courts declare that the only remedy for such invasions of personal liberty rests with the people at the polls. We demand for each child a free school, but we deny that education or accumulated prop-

erty alone confers the right of suffrage. The first duty of Kentucky citizenship is to repeal the Goebel election law, which is the source and continuing strength of the wrongs done in this State."

The Democrats, in State convention at Lexington, July 20, nominated J. C. W. Beckham for Governor. Among the resolutions adopted were the following:

"We recommend that the election law of 1898, which was enacted to prevent the repetition of well-known Republican frauds in certain districts of this State and which was a marked improvement upon the then existing law, but which has not proved sufficient for that purpose, be amended so as to secure this end so thoroughly that the most hypercritical can find no excuse for charging fraud or unfairness to our party in the conduct of the election. Until such amendment can be enacted by the General Assembly we declare that the Republican party shall have representation upon both the State and all county boards of election commissioners.

"We declare to the world that the mob and the assassin shall not be the arbiters of the rights of the citizens of Kentucky, nor shall the penalty of an appeal to the law and the regular constituted authorities be death at the hands of assassins. Law and order must and shall prevail in Kentucky.

"We present to the people of Kentucky the picture of an army of intimidation, unlawfully quartered in the public buildings of the State; a State Senator, in the discharge of his duty to the State, stricken down by an assassin's bullet, fired from ambush in the executive building, then occupied by his political adversary, who hoped to profit by his death; that adversary arming, filling, and surrounding the building with armed men, instructed to defy the civil authorities and prevent search for the assassin; the same political adversary and Republican pretender, by force, dissolving the Legislature, in violation of the Constitution; attempting by military power to force the Legislature to meet in a veritable slaughter pen for the Democratic members; driving its members through the streets of Frankfort at the point of the bayonet, forcibly preventing the Legislature from meeting in its lawful and proper place; keeping armed riotous and disorderly men under the very window of the room where lay dying the assassin's victim; driving the Court of Appeals from the Capitol; aiding with the soldiery and spurious pardons those lawfully accused of capital crimes to flee from justice, and by military force defying the writ of habeas corpus; the same Republican pretender fleeing from the State after indictment and remaining a fugitive from justice, protected by an open violation of the Constitution of the United States, after having declared to the people of the State, 'I am a citizen of this State and amenable to its laws; I am not a criminal, neither shall I ever be a fugitive from justice. Whenever indicted I shall appear for trial.'"

The convention of the People's party, at Louisville, Aug. 1, made W. H. Carden the candidate for Governor, demanded the repeal of the Goebel election law, and recommended the initiative and referendum.

The Prohibitionists named John D. White as their candidate for Governor. Besides reaffirming the general principles of the party, they declared in favor of an election law that would insure the counting of every voter's ballot as it is cast.

The vote on presidential electors stood: Democratic, 234,899; Republican, 226,801; Prohibitionist, 2,429; People's party, 2,017; Social-Democrat, 60; Social-Labor, 289. Mr. Beckham was elected Governor, and he was inaugurated Dec. 11.

KOREA, or CHO-SEN ("Morning Radiance"), a country in eastern continental Asia, between Japan and China and adjacent to Russian, British, and German possessions on what was once Chinese territory. It is separated from Siberia and Russian Manchuria by the Ever-White mountains and the two rivers—the Tumen on the north and the Yalu on the west. Without an exact census, estimates of population vary from 10,000,000 to 15,000,000 souls, females being in the minority, owing to less care being taken of the girls in infancy and childhood. Of the three social classes, the gentry (*yang-ban*, meaning civil and military) live in idleness, not usually paying taxes or tolls, and to some extent in Government employ, or in expectation of it. The common people are almost wholly agricultural, and below them are the seven degraded classes. Physically the Koreans are a finer race than the Japanese, and more refined looking than the Chinese, but they lack moral stamina. Confucianism is the cult of the higher classes, and a debased form of Buddhism the religion of the common people. Sorcery and superstitions abound, influencing nearly all the actions of life. Old evidences of these exist numerous in the grotesque stone and wood sculptures of mythical beasts, the carved wooden distance posts, and the idols set up at the entrances of villages. Christianity, in making rapid headway, is greatly modifying social customs. The old guilds which formerly controlled all industry are abolished in form, but are still powerful.

Government.—Ki-ja, an ancestor of Confucius, is called the founder of Korean civilization, 1122 B.C. Four great historical periods are noted. Old Cho-sen lasted from 1122 B.C. to 9 A.D., giving way to San-Han, or the Three Kingdoms (9-960 A.D.), and these to the one kingdom of Korai (960-1392), and this to the Cho-sen of to-day, founded by the present ruling dynasty in 1392, when Seoul, on Han river, was made the capital. The ancient limits of Korea were far greater than at present. In 1864 the dynasty failed of direct heirs, and the present King, then a minor, was nominated, his father, the Tai-Wen-Kun, being the virtual ruler of the kingdom twenty years. The King reached his majority in 1873. Since the war between China and Japan in 1894-'95, as confirmed by the treaty of Shimonoseki, Korea is no longer a vassal to China, but an independent state. On Oct. 14, 1897, the King assumed the title of Emperor, naming his realm Dai-Han (Great Han, in distinction from the ancient San-Han, or Three Kingdoms). In August, 1899, the written Constitution of the kingdom was issued. Its nine articles declare the country's independence and the absolute power of the King. He is assisted in government by a Council of State and 9 ministers, presided over by the Premier. The ministries are Royal Household, Finance, Home Affairs, Foreign Affairs, War, Justice, Agriculture, and Education. There are 14 provinces in which is a governor and 360 districts in each of which a magistrate presides. Except revenue vessels Korea has no navy, but her army of 5,000 men is uniformed, armed, and drilled in modern style. Of foreign interests in the domain, those of Japan outweigh all others, but Russian influence is very powerful. To the new and specially appointed envoy to Tokio, in November, 1900, the Mikado's Government declined to assure Korea's complete neutrality.

Open Ports.—Nine ports are open to foreign trade, including Chemulpo, 20 miles south of the capital and connected with it by railway; Fusan, in the southeast coast, between which and the capital surveys and estimates for a railway have

been completed; and Wonsen, in the northeast, on Broughton's Bay. Since 1880 foreigners, mostly nontrading, have lived in Seoul. Two new ports were opened in 1895—Mokpo, in the southwest of Chulla province, halfway between Shanghai and Nagasaki, a growing place with a good harbor, and Chinampo, on the northern shore of the Ping-Yang inlet. Since May 1, 1899, 4 new ports have been opened—Kunsan, on the west coast, south of Chemulpo; Masampo, on the southeast, near Fusan; Sungchin, on the east coast; and the city of Ping-Yang, in the north, as a trade mart. Of 20 lots of land sold at Kunsan in April, 1900, 17 were purchased by Japanese and 3 by Chinese. The Masampo concession consists of 83 acres of level land, 300 acres of hill land, and 25 acres of foreshore. The plot acquired by Russia at Chupok-po, near Masampo, measures 83 acres.

There are about 20,000 Japanese in Korea, of whom 4,258 live at Chemulpo, 1,979 in Seoul, 381 in Chinampo, 140 in Ping-Yang. Most of them live in families, the number of women being about two thirds as great as of the men. A majority live at Fusan. While Korean subjects in China have full treaty rights with the most favored nation, in Korea the Chinese can not do stationary trade outside the treaty ports.

The number of Chinese in Seoul and Chemulpo is 1,500 in each place, and in the other ports the total is 500. Almost the whole of the import trade of Korea is in the hands of Chinese, who, since the war of 1894-'95, when they lost their commercial ascendancy, have regained it by their superior commercial morality, absence of speculative enterprise, firmness in combination, perseverance, and frugality.

Foreign Trade.—Although the gold export in 1899 was 557,567 yen, yet general trade declined to the extent of 13 per cent., in comparison with the figures of the previous year, or more than 2,627,568 yen. The chief factor affecting both export and import trade is rice, the value of the export of which in 1899 was 688,805 yen less than in 1898, in spite of the good crop of 1899. Japan is Korea's only consumer of rice. At Chemulpo the Koreans have formed a Chamber of Commerce to protect themselves against Japanese and Chinese. Japan's ascendancy is limited to yarns and cotton fabrics. In 1898 the Japanese imports reached a total of 3,389,000, and her exports 279,000,000 yen, while the Chinese imports reached a total of 4,396,000 and the exports 1,097,000 yen. In exports the trade for 1899, compared with 1898, declined to the extent of 711,640 yen on account of the decrease in value of the ginseng exported. The crop of 1899, a Government monopoly, yielded 1,030,000 yen. The chief imports were English and Japanese shirtings, lawns, muslins, and piece goods, the former worth 80,000 and the latter 190,000,000 yen, besides metals, grass cloths, millet, railway plant machinery, and building material. Japanese yarn showed an increase of 470,000 yen, American petroleum 150,000 yen, and mining supplies 170,000 yen. While the Chinese control the import trade, the Japanese control the export trade, the Japanese apparently knowing how to deal with the Koreans better than the Chinese, and, with their manufacturing centers so close at hand, excelling the English in most of the textile articles, and especially in the importation of yarn, which rose in 1899 to 1,468,300 yen, as compared with 997,490 yen in 1898, nearly 50 per cent., while English yarn fell from 89,790 to 74,960 yen in the same years, the Japanese yarn being so much lower in price. The imports of cotton goods for 1899 form more than half the total imports of the

country. The imports that are growing in favor with Koreans are candles, window glass, and sewing machines. In shipping, foreign trade shows an excess of 502 steamers and an increased tonnage of 159,129 tons in 1899, compared with the previous year. Of 1,666 steamers, with an aggregate tonnage of 746,020 tons, 1,159 steamers and 602,227 tons were Japanese, 4 vessels, of 3,341 tons, were German, 61 vessels, with 51,863 tons, were Russian, and the remainder Korean. The German vessels were under charter to the Japanese.

Mining and Foreign Interests.—The mineral wealth is apparently the greatest among Korea's possibilities. Gold is exported duty free, hence the known figures of export of this metal, 278,825 yen in 1900, are far below the reality. The British syndicate controls the Unsan gold mines, which employ about 500 men, mostly natives. The American gold mines are near Wonsen. The gold-bearing strata, similar in their nature to the Witwatersrand in South Africa, are in a secondary deposit extending to a great distance. At the Wonsen mine, near Ping-Yang, 20 American crushing mills are in operation, with more on their way. Mr. Leighunt, the concessionaire, employs 1 physician, 20 foreigners, 11 Japanese, and 400 Koreans. The Korean Government receives one fourth of the net profits. At Taion, in the same district, an American concessionaire employs 23 foreigners, 8 Japanese, and 600 Koreans. In April, 1900, a survey of the interests of foreigners in Korea shows that the Japanese own the Seoul-Chemulpo Railway and the concession to build, work, and control the Seoul-Fusan Railway, and to exploit 4 gold mines in 4 different provinces and a smokeless coal mine, and have other mining concessions. The whale fisheries on the eastern coast, the establishment of branches of 3 of their national banks, and the control of 16 secular and 2 religious schools are also theirs. The Japanese Government has the management and control of all the posts and telegraphs in the empire. Russia has secured a coal mine and whaling privileges, the same as the Japanese, but with permission to erect boiling stations on shore, besides timber-felling rights along the Yalu and Tumen rivers and on Ulmyung island, in order to obtain lumber for use on the Trans-Asian Railway, with certain rights as to schools. The Americans, besides their gold mines and electric railway in Seoul, have 12 missionary schools in Seoul. The Germans control a gold mine at Tanghyon, employing several hundred men. The English, besides their gold mines and various contract works, have a branch bank, and the customs and finance of the country are under the control of J. McLeavy Brown. Korea has been a member of the International Postal Union since Jan. 1, 1900, and the few foreign officials employed are mostly French.

Finances.—The average income of a Korean family is \$2.50 a month. The income of the Government for 1900 was 6,162,796 yen, and the expenditure 6,161,871 yen. The revenue is from the customs, land tax, household tax, the sale of ginseng, licenses, and concessions, and, when properly collected and paid into the treasury, is ample for all purposes. Japanese newspapers say that of 24,000,000 yen borrowed from Russia, 5,000,000 have been paid. Korea has adopted the gold standard, but coins as yet only nickel and copper. The Japanese currency is used in customs duties and largely at the seaports, the only Korean coins in circulation being the nickel 5-sen and copper 1-sen pieces, besides cash or perforated coins of iron and brass on strings. This cash weighs 7 pounds to the dollar's worth, and suffers from 5 to 50 per cent. discount against the Japanese gold

en, which is the real currency of the country in foreign trade. The rate of discount, varying suddenly and with a wide margin, makes business times largely speculative.

Politics and Events.—The year was measurably free from the usual riots and outbreaks of native peasants against their oppressive *yang-ban* and magistrates, or against Japanese traders and workmen, though another attempt was made with violence to wreck the electric railway and hinder Japanese railway laborers. The palace intrigues and *emeutes* have also been fewer than usual. Reversion to barbarism, in the judicial torture and execution of two Koreans, was made the subject of protest from and negotiation with Japan, and the affair was closed after an apology from His Majesty given through the Mikado's envoy audience. During the Boxer agitation in China there was danger of irruptions across the border.

Wi-ju. A Russian escort of 50 soldiers to the refugee Danish missionaries from China was given free passage, and Korea virtually joined the

allies marching to Peking, giving aid and comfort in the form of 1,000 bags of cleaned rice, 2,000 bags of flour, and several hundred cases of cigarettes. Nevertheless, the formation of a Korean secret society in alliance with the Chinese anti-foreign agitators was accompanied by assaults, with robbery of missionaries, in November. Prince Min-Tong-Whan was appointed minister to Washington, and arrived in time for the New Year's reception at the White House. In October a Korean branch of the Royal Asiatic Society was formed in Seoul. J. H. Gubbins was made president, and the membership consisted mainly of English-speaking residents. The year has been one of great activity and marked success in missionary effort. There are now, besides the native Christians of the Greek and Roman forms of the faith, about 10,000 members of the various reformed churches. Government schools for the study of English, French, Russian, and Japanese are in operation in Seoul, besides the military, medical, and pedagogical institutes.

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LIBRARIES, PUBLIC. The early history of what may be called the new library movement in this country was told in the Annual Cyclopædia for 1886, and subsequent progress was outlined in the volume for 1893. This year the record is here brought down to the end of the century.

One of the most evident signs of progress is found in the increase of libraries, an increase fostered by special legislation. The most noteworthy newcomer in the library field is found in New York city, where the Astor Library, Lenox Library, and Tilden Trust combined forces in 1895 to form the New York Public Library, a consolidation that prevents much duplication of work and makes possible various innovations (longer hours, more book accessions, improved methods), increasing the usefulness of the newly created library. A building is in process of construction on the site of the old reservoir at Fifth Avenue and Forty-Second Street. In 1900 some of the circulating libraries in the city began to make arrangements for consolidating with this library.

The Bureau of Education in 1896 again issued statistics of public, society, and school libraries, in which most of the following figures are taken. Reports were received by the bureau in 1896 from 166 libraries (of more than 1,000 volumes each) in the United States, containing 33,051,872 volumes and 5,444,788 pamphlets. This meant an increase, since 1891, of 523 libraries and 7,074,229 volumes, or 15 per cent. in libraries and 27 per cent. in number of volumes. This difference between 1891 and 27 per cent. was explained by the statement that "unfavorable business conditions since 1891 have operated to prevent the establishment of many libraries, yet the cheapness of books has been favorable to the growth of existing libraries on fixed incomes." The North Atlantic division showed an increase in volumes of more than 28 per cent., the North Central division about 28 per cent., the Western division nearly 40 per cent., the South Atlantic 18 per cent., and the South Central 21 per cent. More than half of the actual increase in the number of volumes was made in the North Atlantic division.

Of these libraries, 2,000 were credited to the North Atlantic division, 322 to the South Atlantic division, 255 to the South Central division, 1,195 to

the North Central division, and 254 to the Western division. In addition, 3,167 libraries were reported as having fewer than 1,000 but not fewer than 300 volumes, and nearly 1,000 had fewer than 300 volumes each. This made a total of 7,193 libraries (of 300 volumes and over) and 34,596,258 volumes, compared with 5,338 libraries and 20,722,393 volumes in 1885, and 3,648 libraries and 12,329,526 volumes in 1875.

Two libraries had 500,000 volumes or more; 4 had 300,000 to 499,999; 28 had 100,000 to 299,999; 69 had 50,000 to 49,999; 155 had 25,000 to 49,999; 411 had 10,000 to 24,999; 630 had 5,000 to 9,999; and 2,727 had 1,000 to 4,999.

Of books drawn for home use, 1,852 libraries reported 35,075,055 in 1896, and 594 reported 7,706,830 volumes used in the reading rooms. The statistics of Greater New York for 1897-'98 show a total of 3,226,807 volumes circulated in that year.

Under the heading Distribution of Libraries and of Volumes, it is shown that in 1891, with 3,503 libraries containing 25,977,643 volumes, there was one library for every 17,877 people, and 41 volumes for every 100 inhabitants in the country. For 1896 the figures were: 4,026 libraries with 33,051,872 volumes, being 17,376 inhabitants for each library and 47 volumes for every 100 inhabitants. The libraries that occupied their own buildings numbered 765, and 548 paid rent. Of the 2,713 others, many were school libraries, which neither owned buildings nor paid rent. The libraries supported by taxation numbered 1,147; by corporations, 2,346; and by both, 14. The free libraries reported numbered 1,558; 635 were free for reference only, and 772 were free to subscribers. Of the 1,061 not reporting, many were corporation libraries free to members. Six hundred and twenty-seven libraries, containing 9,062,363 volumes, and circulating 27,015,234 volumes for home use during the year, were entirely free to the public. Three hundred and forty-two libraries were strictly circulating, 705 were for reference, and 2,600 were both.

The 4,026 libraries were classified as follows: General, 1,560; school, 940; college, 626; college society, 54; law, 127; theological, 97; medical, 44; Government, 23; State, 26; asylum and reformatory, 87; Young Men's Christian Associa-



BOSTON PUBLIC LIBRARY.

tion, 84; Masonic, 14; Odd Fellows, 17; social, 57; scientific, 78; historical, 60; garrison, 14; mercantile, 10; and society, 108.

As to finances: 600 libraries reported a total of \$1,679,210 received from taxation, and \$1,513,352 was appropriated to 773 libraries by States, counties, and cities in the year. Five hundred and ninety-four libraries received \$1,035,052 from endowment funds; 833 received \$386,441 from membership fees; 303 received \$38,684 from book rents; 625 received \$529,350 from donations; 1,017 received \$729,547 from sources not stated. The total income reported by 2,437 libraries for the year ending April 1, 1896, was \$5,911,636. The permanent endowment funds of 605 libraries aggregated \$17,570,673. The value of the buildings owned by 567 libraries was \$33,291,259. The value of the books added during the year by 2,333 libraries was \$1,574,410.

State Aid and Special Legislation.—A review of the whole subject, with a bibliography, is given in the Report of the Commissioner of Education for 1895, accompanied by the full text of all the laws. This work has been furthered greatly by the creation of library commissions in various States.

The first State library commission was organized in 1890 by Massachusetts, followed by New Hampshire in 1891, Connecticut in 1893, Vermont and Wisconsin in 1895, Ohio in 1896, New York and Georgia in 1897, Pennsylvania, Michigan, Minnesota, Indiana, Kansas, Colorado, and Maine in 1899, and New Jersey and Iowa in 1900.

Buildings.—Among the larger library buildings erected within the last decade are the Library of Congress, which cost \$6,300,000; Boston Public Library, \$2,300,000; Chicago Public Library, \$2,000,000; Columbia University, \$1,200,000; Carnegie Library, Pittsburgh, about \$800,000 (the building comprises library, music hall, art-gallery, and museum); Princeton University, \$650,000; Milwaukee Public Library, about \$600,000; Wisconsin Historical Society, about \$600,000; Newberry Library, Chicago, \$500,000; Providence Public Library, \$300,000; and Library of Carleton College, Northfield, Minn., \$250,000. Many libraries costing from \$50,000 to \$200,000 have been built, among them the Kansas City Public Library, \$200,000 (site \$30,000 additional); Pratt

Institute Library, Brooklyn, \$190,000; Library of the University of Illinois, about \$165,000; Forbes Library, Northampton, Mass., \$134,529; Carnegie Library, Atlanta, Ga., \$115,000; Orrington Lunt Library, Northwestern University, \$100,000; Peoria, Ill., Public Library, about \$70,000 (site \$16,000 additional); and Hoboken, N. J., Public Library, \$62,000.

Many of these buildings are due to private beneficence. It is said that, as far as the incomplete statistics show, more than \$24,000,000 have been bestowed by individuals for buildings, books, and maintenance, in the past ten years of the nineteenth century; and there was also a generous expenditure of public money in the same period. The yearly proceedings of the American Library Association include a full report on gifts and bequests.

Management.—*Open Shelves.*—A matter that has been much discussed is that of "free access"—that is, the free admission of the public to the shelves, as in the New York Free Circulating Library. Yet this question still awaits solution, for the arguments appear to be about equal, *pro* and *con*. Most librarians evidently agree in believing that a certain number of books, at least, should be freely accessible to the public. Many libraries have "open reference shelves"—in the new building of the New York Public Library, for instance, arrangements have been made for 40,000 volumes thus placed. In such large reference libraries, of 500,000 and more volumes, it is impracticable to allow unlimited access.

Cataloguing.—Co-operative cataloguing was referred to hopefully in 1893, but the expectations of its warmest adherents have hardly been realized, although the publishing section of the American Library Association continues to issue printed catalogue cards for new books. However, the Annual Literary Index (continuing both Poole's Index to Periodical Literature and the A. L. A. Index to General Literature, 1893) is issued regularly, and in Cleveland the Cumulative Index to periodicals began to appear in 1896. Some scientific periodicals are indexed by the co-operative effort of five libraries—the New York Public, Harvard University, Columbia University, Boston Public, and John Crerar (of Chicago), the index entries being printed on cards of standard size.

Much of the work published, like the last named, under the auspices of the American Library Association, is the product of co-operative effort.

Among the special indexes due to the effort of individual libraries must be mentioned that of technical periodicals in the Patent Office Library in Washington, and the one for trade journals in the Commercial Museums in Philadelphia; both are in manuscript, on cards.

Librarians are, naturally, greatly interested in the international conferences on a co-operative catalogue of scientific literature, held in response to a call from the Royal Society of London, the first in 1896, the second in 1898, the third in 1900. This catalogue, which begins with 1901, is to comprise all published original contributions to mathematical, physical, or natural sciences, to the exclusion of what are sometimes called the applied sciences, whether appearing in periodicals or in the publications of societies, or as independent pamphlets, memoirs, or books. It is to be arranged according to subject matter and author's names, with special regard to the requirement of scientific investigation. The management is intrusted to a central bureau established in London and regional bureaus in various countries, to which latter falls the work of dealing each with the literature of its country. Future international conventions (1905, 1910, and every tenth year thereafter) will make any necessary revision of the regulations.

Interlibrary Loans.—These are becoming more frequent, especially between reference libraries as

a means of partially overcoming the distances between centers of research; they are naturally of great value to the investigator.

This system of sending books on request from one library to another is in vogue at the library of the surgeon general's office (on a noteworthy scale, introduced there by Dr. John S. Billings), the Worcester (Mass.) Library, the medical libraries of Boston, (New York city),



JOHN SHAW BILLINGS,
NEW YORK PUBLIC LIBRARY.

etc., the Academy of Medicine, the Congressional Library, etc.

Circulating Libraries.—The preponderance of the free circulating library in this country has naturally caused much energy to be applied to the improving and simplifying of methods, especially in all that pertains to the keeping of records, as in the charging systems. What is known as the "two-book system" has been introduced in many libraries. This permits the reader to draw two books at a time for home use, but only one of the books may be a work of fiction.

Traveling libraries bring books where the circulating library does not. This system was characterized by R. G. Thwaites, president of the American Library Association in 1900, as "in some respects, perhaps, the most hopeful of all forms of recent library popularization." It provides for small libraries of 25, 50, or 100 volumes, sent from central libraries to "individuals, clubs, and associate libraries in communities roundabout," for

certain periods (usually six months), upon request and under certain conditions. The traveling library was first introduced in 1892 in New

York State, but before that time the Baltimore and Ohio Railroad Company was circulating books to its employees along its line. Since then various systems of traveling libraries have been established, as follows: 1895, Iowa and Michigan; 1896, Colorado, Illinois, Kentucky, Massachusetts, Nebraska, Ohio, Pennsylvania, Virginia, and Wisconsin; 1897, Louisiana, New Jersey, and Tennessee; 1898, Alabama, California, Connecticut, Georgia, Kansas, Maryland, Minnesota, Missouri, Utah, and Washington; 1899, Idaho, Indiana, Maine, Montana, Texas, Vermont, and British Columbia; 1900, Arizona.

In 1893 the first traveling library went out in New York with 100 volumes. In 1898 it was reported that there were more than 1,650 in the country, of which 687 were in New York, with more than 73,000 volumes. Some specialties had already developed, as at the New Jersey Traveling Library at Princeton, which circulated books on forestry only.

The introduction of small collections of selected books directly into the homes of tenement-house residents has also been tried with encouraging results.

Libraries and Schools.—Another recent development in the manifold activity of the American public library is its co-operation with the schools, which, beginning at Worcester, Mass., about twenty-five years ago, has only within the past few years become generally recognized as a department of library work. Boxes of books for instruction and entertainment, selected by the teachers, are sent to the schools—sometimes classified by grades; and traveling school libraries, to assist in certain courses of study, are not uncommon. Other methods of reaching the school children—posting bulletins and lists in schools, the organization of "library leagues" among pupils, etc.—serve to accentuate the community of interests between school and library.

The latest manifestation of this spirit was seen in the year 1900 in New York city, where the Board of Education made arrangements for establishing small libraries in some of the



HERBERT PUTNAM,
LIBRARY OF CONGRESS.



JAMES L. WHITNEY,
BOSTON PUBLIC LIBRARY.

school buildings, to be open evenings, under the supervision of the New York Public Library. The



FREDERICK H. HILD,
CHICAGO PUBLIC LIBRARY.

children's room is a growing factor in our libraries. New methods—picture exhibitions, short talks, attractive surroundings, even games—are used to draw the little ones to the library at an impressionable age.

The Bureau of Education for the past thirty years has emphasized the importance of libraries as aids to instruction, and in 1896 we saw the establishment of the Library Department of the

National Educational Association.

Librarians.—Schools and Training Classes.—In the Annual for 1893 a list of these was given. Since then summer courses have been offered at the Cleveland Public Library, the Ohio State University, and the University of Wisconsin; the Armour Institute Library School was removed to the University of Illinois in 1897, and elementary classes for training assistants have been put into operation in the public libraries of New York city, Denver, Hartford, Dayton, and Butte (Montana), the New York Free Circulating Library, etc.

The report for 1900 of the committee of the American Library Association on schools sounds a warning against giving undue importance to these various schools and training classes, and points out the one-sided education that the pupils are apt to acquire. While the question of the relative merit of school training and practical service in a librarian's equipment is touched upon in this report, sight is not lost of the unquestionable service that these schools have done in systematizing the details of certain work, especially cataloguing. Perhaps those libraries which maintain preparatory classes for prospective assistants, in which theory and practice are mingled, are doing their share in working out this problem.



FREDERICK M. CRUNDEN,
ST. LOUIS PUBLIC LIBRARY.

merly the Central California (formed in 1895), and other such "sectional" associations were organized in southern California (1891), north

Wisconsin (traveling libraries), and western Pennsylvania (1896), and Fox River valley (Wisconsin), Bay Path (Massachusetts), and western Massachusetts (1898). City clubs have been formed in the past seven years in Washington, D. C. (1894), Minneapolis and St. Paul (Twin City Library Club, 1897), and Buffalo, N. Y. (1898).

The American Library Association followed its exhibit at Chicago (1893) by another one at the Paris Exposition of 1900. This association has added to its useful special sections those of small libraries, large libraries, and State and local libraries. Among the new publications issued under the auspices of its publishing section is the List of Subject Headings for Use in Dictionary Catalogues (1895). Here may be noted also the exceedingly useful Catalogue of the "A. L. A. Library of 5,000 volumes for a Popular Library" selected by the American Library Association and shown at the World's Columbian Exposition, published by the Bureau of Education in 1893, and introduced as "a carefully selected list of books adapted to the needs of a small public library and suitable as a basis for a larger collection."

A review of the whole subject of library economy is offered in Public Libraries in America (Boston, 1894) by W. I. Fletcher, librarian of Amherst College. And the index to the first twenty-one volumes of the Library Journal is a key to a veritable storehouse of information on special topics.

Foreign Libraries.

—The foregoing applies, as is seen, to the United States only. The Second International Conference of 1897 at London (the first was in 1877), in which not a few Americans participated, brings us to the foreign field.

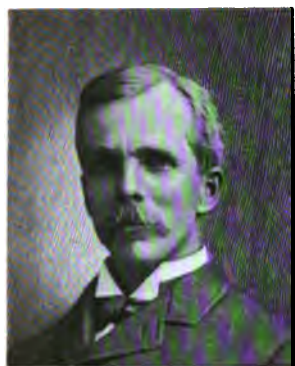
Free public libraries, as we understand them in the United States, exist only sporadically on the Continent in Europe. Gräsel, in the *Börsenblatt* for Dec. 5, 1898, made a plea for their establishment in smaller cities in Germany. Beginnings are cited as follows: The German Society of Ethnology and Culture has established libraries in Berlin, Frankfurt, and Frankfort. In Jena this society operated with the Comenius Society. In Dresden the Association *Volkswohl* opened reading rooms.

Later reports show that in Germany, especially in the eastern provinces of Prussia, the local authorities and educational associations are founding libraries with great energy. To the *Gesellschaft für Verbreitung von Volksbildung* (headquarters in Berlin) is due the credit of having given the incentive to this work and practice of furthering it. From 1892 to 1899 this society founded and aided 1,103 libraries, and in 1900 (November) it founded and aided 438 libraries, pending \$7,000 for this purpose. The libraries administered partly by reading, library, and other educational associations, and partly by teachers, ministers, school boards, etc. Unfortunately,



WILLIAM I. FLETCHER,
AMHERST COLLEGE LIBRARY.

society has not the means for undertaking this work on a larger scale and satisfying all requests.



WILLIAM HOWARD BRETT,
CLEVELAND PUBLIC LIBRARY.

It is noted also that the late Mr. Oswald Ottendorfer founded in Zwickau, Austria, in 1891, a free public library on the plan of the New York Free Circulating Library's branches.

Dziatzko, writing on German libraries, says that the Prussian Ministry of Education in 1892 took a step toward greater uniformity by issuing Rules for the Construction of the Alphabetical Catalogue.

There is increasing liberality in library regulations, making the collections more accessible. As the libraries are usually intended for scholars (all this, of course, refers to university libraries and the like) the conditions for entrance are quite severe. The act in regard to qualifying for trained library service was published in the *Centralblatt für Bibliothekswesen* (vol. ii, pages 77-79). Germany, Switzerland, and Italy have national conferences of librarians.

Italy is startlingly modern. Its system of inter-library loans is so liberal that it will send a rare manuscript from one city to another at Government expense.

A. Chevalley described the poor condition of public libraries in France in the *Library Journal* for 1899, page 21.

Statistics for 1893 show that 1,277,436 volumes were used in the many free circulating libraries established by the city government of Paris.

Poole's Index has now found its counterpart in Germany and France in *Bibliographie der Deutschen Zeitschriften Literatur* (vol. i, 1896) and D. Jordel's *Répertoire bibliographique des principales revues françaises* (first issue for 1897) respectively.

In England the contest over "open access" has raged fiercely. The Clerkenwell Open Lending



INA COOLBRITH,
SAN FRANCISCO PUBLIC LIBRARY.

Library, for example, offers free access to its shelves.

As to Britain's colonies, the Library Association of Australasia was organized in 1896, and the traveling library system has been introduced in British Columbia and New South Wales (1899).

The free library movement has extended to the Orient. Thus a free library was established in Bangkok, Siam, in 1896, and the Manila Public Library in 1900.

It must be remembered that such institutions are usually due to American or English initiative

and support, and are practically libraries for English-speaking people in foreign lands. In Japan, excluding the Imperial Library, there were, in 1899, 30 public and private libraries, containing 346,342 volumes, and these libraries were visited by 46,243 persons in 1897.

The *Library Journal* and *Public Libraries* have

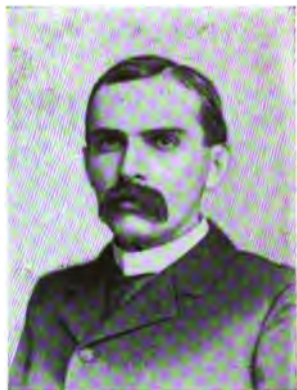
notes on foreign libraries each month. There are also various foreign periodicals devoted wholly or in part to library affairs, although, owing to conditions indicated, their contents differ in character from those of our own journals. Among them are the *Centralblatt für Bibliothekswesen* (vol. i, 1884); *Rivista delle Biblioteche* (vol. i, 1888); *Revue des Bibliothèques* (vol. i, 1891); *The Library* (vol. i, 1889); *organ of Library Association of the United Kingdom*; *Revue internationale des Archives, des Bibliothèques, et des Musées* (first year 1897).

LOUISIANA, a Southern State, admitted to the Union April 30, 1812; area, 48,720 square miles. The population, according to each decennial census since admission, was 152,923 in 1820; 215,739 in 1830; 352,411 in 1840; 517,726 in 1850; 708,002 in 1860; 726,915 in 1870; 939,946 in 1880; 1,118,587 in 1890; and 1,381,627 in 1900. Capital, Baton Rouge.

Government.—The following were the State officers this year until May, when the newly elected administration came in: Governor, Murphy J. Foster; Lieutenant Governor, R. H. Snyder; Secretary of State, John T. Michel; Treasurer, A. V. Fournette; Auditor, W. W. Heard; Attorney-General, M. J. Cunningham; Superintendent of Education, J. V. Calhoun; Adjutant General, Allen Jumel; Commissioner of Agriculture, Leon Jastremski; Commissioner of Insurance, J. J. McCann; Bank Examiner, F. G. Freret; Railroad Commission, C. L. DeFuentes, R. N. Sims, W. L. Foster. The Secretary of State and the Superintendent of Education were re-elected. The other State officers for the remainder of the year were: Governor, W. W. Heard; Lieutenant Governor, Albert Estopinal; Attorney-General, Walter Guion; Treasurer, Ledoux E. Smith; Auditor, W. S. Frazee; Registrar of the Land Office, J. M. Smith; President of the Board of Control of the Penitentiary, C. Harrison Parker; President of the State Pension Board, J. A. Chalaron; Quarantine Physician, J. N. Thomas; Commissioner of Agriculture and Immigration, Jordan G. Lee; Jury Commissioners, J. R. Todd, L. H. Joseph, E. S. Maunsell. All the State officers are Democrats. Chief Justice of the Supreme Court, Francis T. Nicholls; Associate Justices, Newton C. Blanchard, Lynn B. Watkins, Joseph A. Breaux, Frank A. Monroe; Clerk, T. M. C. Hyman—all Democrats.

The term of the State officers is four years. They are elected in April of the years of presidential elections. The Legislature meets biennially in May of the even-numbered years; the session is limited to sixty days.

Population.—The population by parishes, according to the census of 1900, was as follows:



JOHN COTTON DANA,
SPRINGFIELD (MASS.) CITY LIBRARY.

Acadia, 23,483; Ascension, 24,142; Assumption, 21,620; Avoyelles, 29,701; Bienville, 17,588; Bossier, 24,153; Caddo, 44,499; Calcasieu, 30,428; Caldwell, 6,917; Cameron, 3,952; Catahoula, 16,351; Claiborne, 23,029; Concordia, 13,559; De Soto, 25,063; East Baton Rouge, 31,153; East Carroll, 11,373; East Feliciana, 20,443; Franklin, 8,890; Grant, 12,902; Iberia, 29,015; Iberville, 27,006; Jackson, 9,119; Jefferson, 15,321; Lafayette, 22,825; Lafourche, 28,882; Lincoln, 15,898; Livingston, 8,100; Madison, 12,322; Morehouse,



WILLIAM WRIGHT HEARD,
GOVERNOR OF LOUISIANA.

Terrebonne, 24,464; Union, 18,520; Vermilion, 20,705; Vernon, 10,327; Washington, 9,628; Webster, 15,125; West Baton Rouge, 10,285; West Carroll, 3,685; West Feliciana, 15,944; Winn, 9,648.

New Orleans has 287,104 inhabitants; in 1890 it had 242,039. Shreveport has 16,013; Baton Rouge, 11,269; New Iberia, 6,815; Lake Charles, 6,680; Monroe, 5,428; Alexandria, 4,760; Crowley, 4,214; Donaldsonville, 4,105; Plaquemine, 3,590; Lafayette, 3,314; Thibodaux, 3,253; Houma, 3,212; Opelousas, 2,951; Franklin, 2,692; Natchitoches, 2,388; Morgan City, 2,332; Jackson, 2,012.

Finances.—From a statement of the Auditor it appears that from April 1, 1894, to April 1, 1900, State obligations to the amount of \$2,649,206 have been retired at a cost of \$1,393,382, some of the bonds having been retired before maturity. The Governor said in his message in May: "The 4-per-cent. bonds command a premium of 9 to 10 per cent., while the bonds of the various levee boards, which, a few years ago, were very difficult to place, are likewise above par. Not a dollar of the floating indebtedness created since 1880 is left outstanding, and all transactions, both of State and district boards, are absolutely upon a cash basis."

The total revenues derived from all privilege tax turned in by the sheriffs is \$329,157.62, against \$307,517.09 in 1899. The privilege license fees paid direct to the State treasury are not embraced in this statement, and will amount to about \$70,000. The privilege tax report gives also the State revenue from saloons. There are now 13 counties that license the liquor business. Taxes amounting to \$131,100 were paid by the 146 liquor saloons. The municipalities are empowered to levy a tax on dram shops not to exceed 50 per cent. of the amount collected by the State, and in some of the towns and cities the maximum penalty is denounced against them.

Valuations.—The total assessment of the State is \$276,568,507, an increase in one year of

\$8,845,004. Following are valuations reported in December by the State Board of Appraisers: Railroads, \$24,865,275; telegraphs, \$338,634; telephones, \$774,210; sleeping cars, \$96,752; express companies, \$62,610; aggregate, \$26,137,481.

Charities and Corrections.—The number of inmates of the State Asylum for the Insane, at Jackson, this year was 1,195, with a total under treatment of 1,653.

There were 140 at the Soldiers' Home, which has an income of about \$18,000. On the roll of pensioners were 240, with 248 applications under consideration. With the \$50,000 available, the board was able to give only small amounts, divided into three grades—\$4.50, \$3.50, and \$2.50.

The Institute for the Blind graduated a class of 5 in May. Its appropriation in 1899 was \$10,000.

Appropriations for the year to other charitable institutions were: Institute for the Deaf and Dumb, \$18,000; Charity Hospital, New Orleans, \$90,000; Charity Hospital, Shreveport, \$18,000; Lepers' Home, \$7,000; Insane Asylum, \$100,000.

There are about 840 convicts in the State Penitentiary. Under the new management most of them will probably be placed on convict farms.

Education.—The biennial report of the public schools was rendered in June. The school population—children between six and eighteen years—was 404,757 in 1899. The enrollment was 196,169, of whom 74,233 were negroes. The average attendance was 90,187 whites and 56,136 negroes. The number reported as in attendance at private schools was 11,896 whites and 2,798 negroes, though this is not complete; the Superintendent says about 10,000 should be added. The number of teachers in the public schools was: White males, 1,455; white females, 1,617; total whites, 3,072. Colored males, 536; colored females, 549; total colored, 1,085. Total teachers, 4,157.

The schools have several sources of revenue, chiefly the current school fund, which is a tax of 1½ mill on the taxable property in the State. Then there are the poll tax and other special taxes and allowances. The poll tax, the payment of which is required of every registered voter sixty years of age or under, as a condition of casting his ballot, amounted in 1899 to \$115,475, with several parishes to hear from. The amount of revenue for the public schools in 1899 was \$1,242,026.

At the State Normal School, at Natchitoches, 17 were graduated in January and 30 in May. The board arranged in July for establishing a model school; a building will be erected for the accommodation of 480 pupils. The attendance for the fall term had reached 492 on Oct. 10.

The State University and Agricultural and Mechanical College is at Baton Rouge. An appropriation of \$20,000 by the Legislature furnished means for a new building, which will have dormitories for 150 students and dining-room accommodations for 500.

A State industrial school is to be built at Lafayette, to be called the Southwestern Louisiana Industrial Institute. Efforts were made in the Legislature to provide for a textile school, which is deemed desirable in view of the prospects of the cotton manufacturing industry.

The Louisiana Chautauqua, at Ruston, opened July 1 with a large attendance. Summer normal schools at Mansfield and Franklin enrolled large classes of teachers.

St. Charles College, at Grand Coteau, was completely destroyed by fire, Feb. 17. The library, of 5,000 volumes, contained some single books of great value that can not be replaced. There was insurance of \$8,000 on the burned property, which

was valued at \$25,000. The sixty-third commencement of the college was held June 27.

Railroads.—A decision was given in March in the State Supreme Court in favor of the State against the Southern Pacific Railroad Company, which reversed the decision of the lower court, and held that under its charter as a common carrier it may not carry on a storage business, for which it had built great warehouses in New Orleans.

The report of the State Board of Appraisers gives the mileage of railroads in the State in 1900 at 2,123 of main track and 744 of sidings, branch tracks, and double tracks, not including street railroads, which are assessed only in the localities where they exist.

Militia.—Since the war with Spain the militia has been reorganized, and in June the Seventeenth Company of infantry was mustered in, completing the number deemed necessary by the military authorities. The State National Guard is composed of 17 companies of infantry, 10 companies or batteries of artillery, 1 troop of cavalry, and 6 divisions of naval militia, comprising altogether a force of about 2,000 men.

Banks.—The condition of the national banks in the State, June 29, was reported: Loans and discounts, \$3,697,049; stocks, securities, etc., \$112,743; gold coin, \$66,188; total specie, \$321,712. United States certificates deposit for legal tender notes, \$402,358; individual deposits, \$4,210,222; average reserve held, 25.87 per cent.

Including savings banks, there are 57 State banks, 8 of which are in New Orleans.

In September, 1900, the capital of all the State banks and savings banks amounted to \$3,820,210.

The last returns of the condition of the State banks, dated June 30, 1900, show that the reported surplus and undivided profits amounted to \$1,548,320.13, against \$1,386,530.31 on Sept. 30, 1899, a gain of \$161,789.82. The average rate of discount on stock paid by the State banks outside of New Orleans for the year 1899 is more than 10 per cent.; this, added to the surplus and undivided profits gained in the same time, shows something over 16 per cent. as the net profits of these institutions.

Insurance.—In a suit of the city of New Orleans against the Liverpool and London and Globe Insurance Company, the State Supreme Court decided in May that the foreign company must pay a license of \$2,400 for the privilege of conducting its business in the city during the year 1899, with 2 per cent. a month interest from March of that year. If it could be shown that a municipal license had been paid by the company in any other town or towns in the State, based on premiums there collected or receipts there received, the city of New Orleans could not afterward claim to include such premiums or receipts in the aggregate amount upon which it demanded a license, even though the returns of such premiums collected elsewhere had been made to the principal office of the company in New Orleans. The company had contended that it was liable only for tax on the business with in the city.

Products and Industries.—The cotton crop is given as 625,000 bales; the consumption in mills of the State, 16,420 bales; there are 6 mills, of which 4 were in operation. The sugar crop was small, as it has been for two or three years; it was estimated at 250,000 long tons.

The timber business has made progress, as shown by the Auditor's report. In 1900 there were 229 licensed sawmills, against 202 in 1899. The cotton-seed-oil mills have increased from 28 to 41.

The Governor's message says of the rice indus-

try: "It has assumed colossal proportions on the shores of the Mississippi, but more particularly in south Louisiana, where great irrigation canals have been made and mammoth pumping plants and rice mills established. Those canals are made by throwing up levees from 10 to 50 feet apart, into which the water is pumped from streams. The canals are navigable by small boats. They range from 2 to 20 miles in length, watering from 1,000 to 20,000 acres. The capital invested will soon approximate \$3,500,000, showing a total length of 300 miles of main canals and 500 miles of laterals, capable of watering 200,000 acres. No less than 14 rice mills have been erected in this territory, and several more are in course of construction. Rice irrigation is also carried on from wells."

Lawlessness.—A series of bloody disturbances occurred in New Orleans in July. The trouble began when, at the request of some frightened colored women, two policemen attempted to arrest two colored men. One of the colored men not only shot one of the policemen, but retreated to one house after another with his Winchester rifle and shot several others who attempted to arrest or shoot him. He was conquered at last only by setting fire to the house in which he was concealed. Meanwhile a mob of boys, very young men, and hoodlums had seized the occasion to go through the streets and kill or maltreat peaceable negroes of both sexes. A colored schoolhouse in which the negroes were reported to have stored ammunition was burned by the mob. The total casualties resulting from this affair were reported as 11 persons killed, 3 mortally wounded, and 28 seriously injured.

Four suspected negro burglars, all ex-convicts, were taken from jail at Ponchatoula, Sept. 20, and hanged.

A negro ex-convict and cattle thief was terribly whipped by whitecappers near Lake Charles, May 12.

On June 23 a man was lynched near Springfield for the murder and robbery of an aged woman.

A negro who shot and seriously wounded a railroad conductor was lynched near Plaquemine, Oct. 19.

A negro who had made threats against the lives of two men was lynched, June 9, at Devall.

For attempted criminal assault a negro was lynched at Lena, May 12, and one at Whitehall, Aug. 27.

A negro who confessed a murder was hanged by a mob, about Aug. 30, at Cheneyville.

April 20, in Livingston Parish, a party of 6 or 8 white men rode up to a negro's house and fired into the dwelling, wounding one of the occupants. They then rode on to the next house and fired a second volley, killing a negro boy. Four young men of the party were arrested. The shooting is said to have been without cause.

A lumber company attempted to work a new sawmill at Tioga with mixed labor, but the whites began shooting at the negroes to force them to leave, as they have been compelled to do at many of the other mills on the line of the Iron Mountain Railroad.

A dispatch of Aug. 15 said: "The commission appointed by the second white mass meeting in Cheneyville, La., to regulate the negroes of that neighborhood went to work yesterday. The resolutions adopted ordered the negroes to give way on the sidewalk to white people and also prohibited them from gathering at the railroad depot. A young negro jumped on a railroad train yesterday and got in the way of some white passengers. It was decided by the commission to discipline him."

He was therefore marched to the business center of the town, straightened out, and given 50 lashes with a cowhide whip, in the presence of a large audience of whites and negroes."

At Allentown, in April, the foreman of a lumber mill was shot and instantly killed by a negro, who then took his own life. Two other negroes were arrested on a charge of having conspired with the murderer to kill the foreman; they were seized by a mob and hanged in the woods.

A riot arose at Lake Charles in September, in consequence of an assault by a negro on an old lady at Chloe station. A mob attempted to take him from the jail where he was placed after arrest, and in the attempt the jailer was killed by a shot from the mob. Three men were arrested, charged with the murder. The negro was sentenced to twenty years' imprisonment.

Political.—The State election was held April 17. It was the first general election held under the new Constitution. The total registration was 129,729; of these it is said that about 7,000 were negroes. Not only negroes, but many naturalized foreigners, were disfranchised by the new election provisions requiring educational or property qualifications. There were three tickets in the field—the Democratic, the regular Republican, and the Republican-Fusion.

The nominations made at the Democratic convention, which was held Dec. 20, 1899, were: For Governor, W. W. Heard; Lieutenant Governor, Albert Estopinal; Secretary of State, John T. Michel; Attorney-General, Walter Guion; Superintendent of Education, Joseph V. Calhoun; Treasurer, Ledoux E. Smith; Auditor, W. S. Frazee.

The regular Republicans, also called the Wimberley Republicans from the name of the State member of the National Republican Committee, appointed their convention for Feb. 5, when they met at New Orleans and selected the following candidates: For Governor, Eugene S. Reems; Lieutenant Governor, F. B. Earhart; Treasurer, Benjamin Bloomfield; Auditor, James Forsythe; Attorney-General, Robert P. Hunter; Superintendent of Education, D. M. Lines.

On Feb. 6 a convention was held at Alexandria by a section of Republicans, composed in part of the sugar planters who left the Democratic party at the time the sugar bounty was discontinued. They have been called the "Lily Whites." They were joined by other Republicans not favoring the management of the regular party, and the following ticket was named: For Governor, C. Taylor Cade; Lieutenant Governor, W. G. Wyly; Treasurer, T. J. Woodward; Attorney-General, Clay Knobloch; Secretary of State, W. J. Behan; Auditor, J. C. Weeks; Superintendent of Education, C. K. Murray.

The People's party, at Alexandria, Feb. 7, agreed upon the following ticket: For Governor, D. M. Sholars; Lieutenant Governor, T. J. Woodward; Secretary of State, J. T. Howell; Attorney-General, Taylor Beattie; Auditor, O. H. Deshotels; Treasurer, B. W. Marsden; Superintendent of Education, O. B. Staples.

Committees of the independent Republicans and the Populists held a conference about Feb. 20; they were joined by independent Democrats who, under the leadership of Senator Caffery, were opposed to the administration of Gov. Foster and to the election provisions of the new Constitution. Senator Caffery seems to have been out of favor with his party on account of his gold standard principles and his having voted in Congress against some measures deemed of interest to the citizens of the State. The fusion ticket was headed by his son. It was: For Governor, Donelson Caffery,

Jr., independent Democrat; Lieutenant Governor, D. M. Sholars, Populist-Democrat; Attorney-General, W. G. Wyly, Republican; Secretary of State, C. Taylor Cade, Republican; Treasurer, George A. Haasinger, Republican; Auditor, O. H. Deshotels, Populist; Superintendent of Education, O. B. Staples, Populist. Mr. Caffery's letter of acceptance may be taken as a declaration of the principles of the combined parties. He said in part: "The sole memento of the vanished question of race supremacy is found in Democratic majorities based on negro votes counted but not cast; and having fought and prevailed against an unbearable and now impossible domination, it becomes necessary for our people to resist the domination of overgrown power armed with the weapons intrusted to the officers of State for the defense of our civilization. Under our government of majorities without votes, we have learned that there may be a more odious form of oppression than taxation without representation. The Governor must not be the fountain-head of political authority. The school system must be removed from petty politics. The registrars must be elected by the people of the several parishes. The registration must not be a partisan weapon. All candidates must have the right of naming their commissioners of election. The trick laws governing the official ballot and representation at the polls must no longer throttle opposition to the candidates of the party in control, and as the whole system of registration and election laws was designed to prevent the growth and formation of opposing parties and the building up of that spirit of independence which is the life breath of the republic, a new system must be introduced which will hold out to the people all the opportunities now denied them."

There was trouble about the official ballot and the election commissioners. Those to which the Republicans were entitled were in most parishes given to the regular Republicans, though in some to the fusionists. In sending in their nomination papers, the fusionists appended the requisite number of signatures, but in parishes where signers afterward withdrew their names by telegraph, the election board was unwilling to allow the names of the candidates to appear on the official ballot.

The election resulted in victory for the Democrats on the State ticket and on nearly every local ticket. The total vote was less than half as large as at the last State election. The vote for Governor was: Heard, Democrat, 60,206; Reems, Republican, 2,449; Caffery, fusion, 14,215. The vote for presidential electors was: Democratic, 53,671; Republican, 14,233.

A proposed amendment to the Constitution was carried, which will enable New Orleans to issue bonds to pay for water, sewerage, and drainage improvements.

The Legislature elected was wholly Democratic.

The Democratic convention for choosing delegates to the national convention and nominating electors was held June 4, at Baton Rouge. The delegates were instructed for William J. Bryan. The resolutions denounced the imperialistic policy of the administration, condemned the annexation of the Philippines, asked that the government of Cuba be given into the hands of its citizens, denounced trusts, opposed wars of conquest and acquisition of colonies and militarism, asked national aid for the levee system and the deepening of the channel of the Southwest Pass at the mouth of the Mississippi, favored the construction of the Nicaragua Canal immediately by the United States alone and the election of Senators by direct vote of the people, and expressed sympathy for the Boers.

The so-called "Lily Whites" sent out an address, July 9, in which was said in part: "The National Republican Convention, assembled at Philadelphia, recognized this State committee as the regular Republican organization of the State of Louisiana. This happy event awakens the liveliest enthusiasm throughout the whole State and among all classes of people. In it they see the great advantage of a strong and vigorous opposition party to the ruling dynasty in this State, which has usurped all the functions of government and appropriated the whole power of the people. The excuse for padding the registration, stuffing the ballot boxes, and forging the election returns heretofore given by the Democratic leaders has now disappeared, and even the instruments of their conspicuous and admitted frauds will not be able to perpetrate them again.

"The State of Louisiana is as much interested in a Republican success at the coming election as New York or Illinois. All of the important industries of Louisiana are dependent on Republican policies. The sugar, rice, lumber, salt, cotton, iron, tobacco, and other industries are directly dependent on the protection accorded them by the Tingley bill. The business of our people, the volume of business and their prosperity are dependent on a sound and stable currency which the Republican party maintains and which the Democratic party threatens to destroy.

"Louisiana is a Republican State on a free vote and a fair count. With all of the machinery of the State government, the most complete and drastic campaign which the Democratic party could prosecute, with every State, parish, and local office dispute, with all of its padding of returns, the Democratic party was able to poll in April but 1 per cent. of the registered vote of the State."

The Central State Committee of the People's party sent out an address calling upon their party to vote for the presidential and congressional candidates of the Republican party.

The vote for presidential electors stood: Bryan, 1,671; McKinley, 14,233. The members of Congress elected were all Democrats. The amendment to increase the amount available for pensions for Confederate soldiers to \$75,000 was carried by 320 against 1,440; the limit heretofore was \$50,000. W. L. Foster was elected Railroad Commissioner for the Third District.

Legislative Session.—The Legislature assembled May 14 and adjourned July 12. Jared Y. Sanders was Speaker of the House. Gov. Heard and Lieut.-Gov. Estopinal were inaugurated May 21.

Two United Senators were elected May 22—Senator Samuel D. McEnery to succeed himself at the expiration of his present term (1903), and Gov. Murphy J. Foster to succeed Senator McEnery in 1901.

A new law for primary elections was enacted, regulating the manner of calling and conducting them, the appointment of officers, the taking of oaths and counting them, and providing penalties for illegal voting, acceptance of illegal votes, bribery, and intimidation. The penalties are a fine of \$25 to \$300, or imprisonment for terms from ten days to three months, or both. The general election law was amended in details regarding nominations.

An amendment to the bank reserve act provides that every bank, banking association, corporation, or company organized under the laws of the State shall at all times have on hand in lawful money of the United States and cash due from other banks an amount equal to 25 per cent., 8 per cent. of which shall be kept at all times on their respective

premises in cash, of the aggregate amount of its demand deposits. The amount to be thus kept on hand shall be called its lawful money reserve. For the remainder of said liabilities to depositors an amount equal thereto in lawful money of the United States on hand or due from other banks, bills of exchange or discounted paper maturing within twelve months, bonds of the United States, bonds of the State of Louisiana, bonds of the city of New Orleans, or bonds of the several levee districts of the State of Louisiana.

A measure that met with much opposition, but passed and became a law without the consent of the Governor, modified the civil service law of New Orleans, exempting certain offices from the operation of the law requiring academic examination, and making other changes.

An important law provides for the care and control of the State convicts. When the present lease for their labor expires, March 3, 1901, they are not to be leased to private contractors again. A board of control is created, to be composed of three citizens appointed by the Governor. The first appointees are to serve two, four, and six years respectively, and after appointments will be for six years. This board has authority to appoint and discharge at its discretion all officers and employees, designate their duties and fix their salaries. It must prohibit harsh and cruel punishments, establish a system of work and discipline conducive to the reformation of the prisoners, and give them the right to communicate directly with the board without the interference of an officer. It is authorized to purchase or lease such lands as may be necessary for occupation by the convicts, who are to be employed in agriculture or manufacturing and in the construction and repair of public works. It is further stipulated that the board shall, as soon as possible, establish a reformatory branch of the Penitentiary, in which all convicts who are between the ages of seven and seventeen years shall be separated from the other convicts.

A Bureau of Labor Statistics was created.

A special license tax was imposed on the sale of pistols and cartridges—\$125 on wholesale dealers in pistols and \$50 retail; on cartridges, \$50 and \$25.

A revenue act provides for increased income to the State. The tax on oil corporations was reduced one half. Secret or fraternal societies not exclusively benevolent must pay a license tax.

The board of examining dentists is replaced by a State Board of Dentistry—5 members, appointed by the Governor for seven years.

Acts relating to insurance companies are: To prevent combinations among fire companies to fix rates; to provide that the value of immovables by nature shall be fixed by the insurer when the policy is issued, and that he is to pay the total loss or restore property damaged; and companies taking marine and river risks on the stock plan must have capital of \$100,000 instead of \$200,000, as formerly.

The game laws were amended.

Other acts were:

To encourage high schools by appropriations from the general fund.

Requiring examination of homestead and loan associations.

Requiring employers to provide seats for woman employees.

Prohibiting marriage between first cousins.

Appropriating \$300 to the fund for placing in Memorial Hall, Washington, a bronze bust of George Peabody.

Making appropriation for a permanent home for lepers.

Permitting sugar mills and refineries, sawmills, rice and cotton-seed-oil mills, and irrigating plants to issue bonds.

Incorporating the city of Monroe.

Creating a State museum at New Orleans.

Authorizing the City Council of Lafayette to issue bonds to raise \$14,000 to construct buildings for the Southwestern Industrial Institute, and the police jury of Lafayette Parish to raise in the same way \$32,000 for the same purpose.

Prohibiting the use of trading stamps.

Requiring factors, brokers, commission merchants, and middlemen to embody in all accounts of sales of cotton and other agricultural produce the name of the person to whom such produce is sold, the date when sold, the actual classification of such produce, and the name of the person by whom such classification was made.

To provide a system of obtaining, compiling, and promulgating official reports of the conditions and yield of agricultural products of the State and other statistical information.

Providing for settlement of successions under \$500.

Two constitutional amendments were passed and submitted to vote in November, when they were adopted. One was to increase the amount of money that may be used annually for Confederate pensions to \$75,000, and stipulating that not less than \$50,000 be distributed. The purpose of the other amendment was to ratify the special tax for public improvements voted by New Orleans in June, 1899.

LUTHERANS. The official reports of synods and congregations of Lutherans in America show a net increase in 1900 of 95,744 communicant members. The statistics gathered for the Lutheran Church Almanac present the following results: Sixty-one synods, 6,710 clergymen, 11,123 congregations, 1,665,878 confirmed members, 4,097 parochial schools, 3,964 teachers and 190,896 pupils, 4,981 Sunday schools, 60,133 officers and teachers, and 568,837 pupils. The statistics of Sunday schools are, however, very defective, the actual number being much larger than here indicated. The benevolent contributions—for missions, education, and other charitable purposes—aggregate \$1,171,765.30. There are in connection with the various synods or under Lutheran control 23 theological seminaries, 47 colleges, 34 academies, and 11 colleges for women, whose property is valued at \$5,121,060, with endowments amounting to \$1,646,293, employing 859 professors and instructors, and having 12,854 students, of whom 2,338 have the ministry in view. The benevolent institutions number 99, of which 43 are orphanages, 19 homes for the aged, 18 hospitals, 8 deaconess institutions, and 11 immigrant and seamen's missions, with property valued at \$4,392,896, endowments amounting to \$462,629, and 24,913 inmates. The property used for educational and benevolent purposes is valued at \$9,513,956, and the endowments amount to \$2,108,922. Many of these institutions, some of the strongest and most influential, have no endowment at all, but are supported by voluntary offerings of the members of the congregations. This is especially true, though not exclusively, of the institutions established and maintained by German and Scandinavian Lutherans.

The polity of the Lutheran Church in this country has assumed the synodical form, the synods being composed of clerical and lay delegates of congregations. The number of synods is now 61, most of which are merely territorial or linguistic divisions. Of these, 15 occupy independent positions, the rest are united in 4 general bodies, as follow:

SYNODS.	Minist- ters.	Congre- gations.	Communi- cant mem- bers.	Benevol- ent offer- ings.
Synodical Conference	2,029	2,650	581,029	\$270,679
General Council.....	1,156	2,019	370,400	286,307
General Synod.....	1,226	1,568	194,442	260,018
United Synod, South.	215	390	38,639	24,133
Independent synods..	2,064	4,406	481,350	350,626
Totals	6,710	11,123	1,665,878	\$1,171,765

Of the general bodies, the Synodical Conference is almost exclusively German, the General Synod and United Synod are almost exclusively English, and the General Council embraces English, German, and Scandinavian pastors and congregations. The Synodical Conference and the United Synod of the South held conventions this year, reports of which follow. For the reports of the last conventions of the General Council and General Synod see Annual Cyclopædia for 1899.

Synodical Conference.—The Evangelical Lutheran Synodical Conference held its eighteenth biennial convention at Bay City, Mich., Aug. 8–1900. The election of officers resulted as follows: President, the Rev. John Bading, Milwaukee, Wis.; Vice-President, the Rev. P. Brandt, Pittsburgh, Pa.; Secretary, Prof. John Schaller, N. Ulm, Minn.; Treasurer, Mr. C. Christiansen, Detroit, Mich. The Rev. Olaf E. Brandt, of Decorah, Iowa, brought the greetings of the Norwegian Synod. The following named synods were represented by clerical and lay delegates: Synod of Missouri, Ohio, and other States, the General Synod of Wisconsin, Minnesota, and Michigan, the English Synod of Missouri and other States. The Committee on the Revision of the English Translation of Luther's Catechism presented a report, which was discussed, and the committee was continued, with instruction to present its final report at the next convention. A large portion of the business sessions was devoted to discussion of missionary operations among the colored people of the South. The financial report of the board showed a total income for the two years of \$300.53, and expenditures of \$36,789.75. A memorandum from the Immanuel Conference of the negro missionaries in North Carolina was presented, praying for the establishment of a Lutheran college for colored race in the South. The board was instructed to make a thorough investigation of the matter during the next biennium and report at the next convention. The doctrinal discussion of this convention was on the subject of The Necessity of the Christian Parochial School for the Christian Family, the Church, and the State. A cheap edition of the report of the discussion in German and English, is to be printed for general distribution. The next biennial convention of the body will be held in Milwaukee, Wis., in 1902.

United Synod.—The United Synod of the Evangelical Lutheran Church in the South held its seventh biennial convention in August at Church, Winston-Salem, N. C., May 16–20, 1900. The following named officers were elected: President, the Rev. James B. Greiner, Rural Retreat, Va.; Vice-President, the Rev. Robert A. Yoder, D. D., Hickory, N. C.; Secretary, the Rev. Lancelton G. G. Scherer, Newberry, S. C.; Treasurer, Charles H. Duls, Esq., Charlotte, N. C. The next convention will be held in May, 1902, at Charleston, S. C. The synods of North Carolina, South Carolina, Tennessee, Virginia, Southwestern Virginia, Georgia, Mississippi, and Holston of Tennessee were represented at this convention by 15 clerical and 34 lay delegates. The Rev. Steffen A. Repass, D. D., of Allentown, Pa., attended

convention as the official visitor of the General Council.

The work of the convention consisted chiefly in considering and acting on the reports of the various boards. The Board of Missions and Church Extension has charge of the work of home and foreign missions, and employs a general secretary, with headquarters at Atlanta, Ga. The board supports 21 missions, of which 6 are in Virginia, 1 in West Virginia, 4 each in North Carolina and Tennessee, and 3 each in Georgia and Mississippi, for the support of which \$7,531.23 was expended in the past two years. In these missions there are 1,500 communicants and 1,300 Sunday school pupils. The church property belonging to these missions is valued at \$82,900. At present 15 missionaries are employed and 2 mission points are without pastors. The board say: "The work continues to increase on our hands—more missionaries are needed, more churches are to be built, more territory is to be occupied than ever before. As a consequence, more money is needed to carry on the work successfully. We fully appreciate the faithfulness and liberality of many pastors and congregations and societies as manifested by the continued contributions to our home missionary treasury. If, however, this work is to be in the future what it ought to become, we feel that some means must be devised to secure from the synods a larger part—the entire amount, if possible—of the apportionment asked from them by the United Synod.

The report of the board concerning its work in Japan shows encouraging progress. The mission, begun only a few years ago, is in a flourishing condition. A congregation has been established at Saga, and in 1898 work was begun in Kumamoto, one of the largest cities in the Kyushu district, with a population of 80,000, and in 1899 work was begun in the city of Kurume, midway between Saga and Kumamoto. Since the last report of the board 2 natives have been ordained to the office of the ministry. The board now employs 3 ordained missionaries, 2 native pastors, and 4 unordained helpers in 4 stations and 3 out stations. The mission force in Japan has organized 4 Sunday schools, in which 150 pupils are taught. The mission has 82 baptized members.

On the territory of this general body there are 7 educational institutions and 1 orphanage, supported either by the general body or by the district synods. Among these is Roanoke College, Salem, Va.

The committee on the common service and cooperation with other English-speaking Lutheran bodies reported progress in the work of securing a common book of worship and ministerial acts. The translation of Luther's Small Catechism, prepared by the joint committee with a view of making it the standard English translation for the entire Church, was adopted in the form in which it had been adopted previously by the General Council and the General Synod.

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MADAGASCAR, an island colony of France near the southeast coast of Africa, formerly a kingdom, proclaimed a French protectorate in 1885, when a French force occupied Diego Suarez. The protectorate was denied by the Hova Queen until, after a French expedition, a treaty of peace was signed on Oct. 1, 1895, and as the result of another expedition to suppress an insurrection which occupied the capital the island was declared a French colony on Aug. 6, 1896. Queen Ranavalona III was deposed on Feb. 27, 1897, in consequence of fresh disturbances. Great Britain recognized the French protectorate in 1890 in return for the renunciation by France of consular jurisdiction in Zanzibar. A dispute subsequently arose about the application of the special French tariff to British goods, Great Britain claiming most-favored-nation treatment under a treaty made with the Hova Queen in 1865 by virtue of an assurance, asked for and received from France in connection with the British recognition of the protectorate, that none of the rights and immunities enjoyed by British subjects in Madagascar would be affected. The French Government took the view that the assurances applied only to the protectorate, and that when it exercised the right of changing the status of the island to a French colony all treaties made by the Hova Government became void. The French claims to Madagascar date from the earliest period of French transmarine colonization, and were first asserted in 1642 by a company that obtained a charter from the King of France. Trading settlements were planted on the coast, and viceroys were appointed at different periods, but the factories were abandoned and French authority was ephemeral and disappeared entirely after the King of the Hovas, the part Malay tribe in the center of the island, reduced the greater part of Madagascar to his sway about 1810. In the semicivilized kingdom that

was developed English Protestant missionaries acquired great influence, and American and British traders controlled the commerce of the island until at the beginning of the new era of colonial expansion the French revived their ancient claims and established their authority by means of a series of armed expeditions. The deposed queen was deported to Réunion in March, 1897, in consequence of continued intrigues against the French Government, and in March, 1899, for a like cause, she was taken to Algiers. The Governor General rules the island with the assistance of an Administrative Council sitting in Antananarivo, and of residents in the coast towns and the principal military stations. He is commander in chief of the troops. Gen. Gallieni is Governor General, and during his absence Gen. Pennequin has acted in his place.

The area of the island is estimated at 228,500 square miles and the population at 3,500,000 or upward. The females are considerably more numerous than the males. Creoles from Mauritius and Réunion, Chinese, and East Indian Banyans are settled as traders in the coast towns. The Hovas formerly kept garrisons among the other tribes, and appointed governors over them. Their language is generally understood throughout the island. They number between a quarter and a third of the total population. The Sakalavas are more numerous. The Betsileos are the third largest tribe, and after them the Betsimisarakas and Baras. Many African blacks interspersed among the people were originally brought over and sold as slaves by the Arab traders, who are still numerous along the coast. The slave trade was declared illegal by an edict of the Hova Queen in 1877, but was not suppressed. Since the French introduced a colonial administration they have abolished slavery wherever their authority is exercised; in the central province of Imerina, the

Hovas' country, they have freed all slaves. The emancipation proclamation was issued on Sept. 27, 1896. The Hova Government compelled the common people to work without pay at all times when the Queen desired their services. This system of forced labor the French have retained in a modified form, requiring the natives to labor on the roads or other public works for thirty days in the year. Besides duties on foreign goods exceeding 50 per cent. ad valorem, many money taxes are imposed. Duties on French imports are 4 per cent.

The Hovas and the tribes in the central districts who were under their immediate dominion were nominally converted to Christianity before the French occupation. English Congregationalism was adopted as the state religion, and was professed by the aristocracy generally. The Anglicans, the Friends, and the American and Norwegian Lutherans also established missions, and French Catholics secured 50,000 converts, the number of Protestants being about 450,000. Since the establishment of French rule the English Protestant missionaries, who encouraged the Hovas to resistance, have been discountenanced, and many of the natives have embraced the Roman Catholic faith. Through this wholesale conversion of former Protestants by the French priests the property of many of the Protestant missions was forfeited in 1897, but some of their churches have since been restored to the Protestant societies. The missionaries used to teach 170,000 Malagasy children in 1,800 schools. The French have established secular schools, and in 1897 they opened a technical school in which natives are taught to be blacksmiths, tinsmiths, painters, carpenters, tailors, potters, etc. The natives can work skillfully in their own way in metal and wood and weave cloth from cotton, silk, and raffia fiber. Their principal occupations are agriculture and the breeding of cattle. Rice, sugar, cotton, coffee, cacao, cloves, vanilla, and yams are cultivated. The forests are of vast extent and rich in valuable woods. The most important commercial product at present is rubber, which is shipped to London and Hamburg. French enterprise and colonization are encouraged by free grants of land, and land is offered for sale to foreigners. Mining companies must be under French management, and some have lost their concessions and American and other claimants to lands conceded by native chiefs have been ousted because their rights were not recognized by French law. Many mining concessions have been granted, but only a few are worked, mainly gold mines. Besides gold, copper, iron, galena, sulphur, graphite, and lignite have been found. The chief ports are Tamatave, on the east coast, and Majunga, on the west coast, each with about 8,000 inhabitants. Antananarivo, the capital, has 70,000 or more. The local revenue of Madagascar is about 10,000,000 francs. The expenditure of France in 1900 was 25,181,048 francs. The debt was converted in 1897 into 2½-per-cent. bonds amounting to 20,000,000 francs, requiring an annual expenditure for interest and amortization of 960,000 francs. By the operation 3,854,478 francs were saved, and the savings were applied to building roads and other improvements. For the construction of railroads, telegraphs, lighthouses, and harbor works a new loan of 60,000,000 francs is authorized. Telegraphs connect Antananarivo with Tamatave and with Majunga, whence a cable has been laid to Mozambique. Other telegraph lines run to Manazary, on the east coast, from the capital and from Fianarantsoa. A railroad from Antananarivo to Tamatave is projected, to be built by a French company which will receive concessions of lands, mining rights, etc. The lagoons running along

the east coast are to be dredged out so as to form a continuous canal. During 1898 the ports of Madagascar were visited by 6,061 vessels, of 879,362 tons, and of this tonnage 734,068 tons were French, 78,053 British, and 30,305 German. Of the imports, amounting to 21,641,000 francs, 17,030,000 francs were French, 1,048,000 francs British, and 435,000 francs German. Of the exports, amounting to 4,960,000 francs, 1,867,000 francs went to France, 823,000 francs to Great Britain, and 1,052,000 francs to Germany. The legal coin is the French 5-franc piece, which the people formerly cut into pieces to be used for fractional currency. The Government has forbidden this practice and redeemed the cut coins, allowing 5 francs for 30 grammes of the silver, the weight of the 5-franc piece being 25 grammes, and now fractional French coins, silver and copper, are coming into use. The military force maintained by France in Madagascar in 1900 consisted of 9,187 infantry and 2,118 artillery and engineers. There were 375 French officers, 764 French and 285 native noncommissioned officers, and 2,715 French and 7,215 native privates; total, 11,305 men of all ranks. The French budget appropriated 23,375,482 francs for military expenses in Madagascar.

About the beginning of 1900 the plague broke out in Tamatave, and in spite of the enforced isolation of the town, entailing much hardship, it spread to other places. The gold mines in 1900 yielded three times as much as in the preceding year. The Transvaal war interfered with trade to some extent. Fortifications were erected at Diego Suarez, and two artillery batteries were sent out. A total force of 4,100 men was dispatched to Madagascar, comprising besides the 100 French gunners, 2 battalions of the foreign legion of Algiers, 1 battalion of Soudanese and 1 of Senegalese sharpshooters, and a battalion of marine infantry.

MAINE, a New England State, admitted to the Union March 15, 1820; area, 33,040 square miles. The population, according to each decennial census since admission, was 298,269 in 1820; 399,455 in 1830; 501,793 in 1840; 583,169 in 1850; 628,278 in 1860; 620,915 in 1870; 648,936 in 1880; 661,086 in 1890; and 694,647 in 1900.

Government.—The following were the State officers during the year: Governor, Llewellyn Powers; Secretary of State, Byron Boyd; Treasurer, F. M. Simpson; Attorney-General, William T. Haines; Adjutant General, John T. Richards; Superintendent of Schools, W. W. Stetson; Bank Examiner, F. E. Timberlake; Insurance Commissioner, S. W. Carr; Liquor Commissioner, James W. Wakefield; State Librarian, Leonard D. Carter; Land Agent, Charles E. Oak; Commissioner of Fish and Game, H. O. Stanley; Railroad Commissioners, Joseph B. Peaks, Benjamin F. Chabourne, Frederic Danforth; State Topographical Survey, Leslie A. Lee, William Engel, Charles Hichborn; State Board of Health, C. D. Smith; President; Inland Fish and Game, Leroy T. Carlton; Commissioner of Labor and Industrial Statistics, Samuel W. Matthews; Pension Agent, C. Milliken; Chief Justice, John A. Peters; Supreme Court Judges, L. A. Emery, Thomas H. Haskell, Andrew P. Wiswell, S. C. Strout, A. H. Savage, William A. Fogler; State Detective, Frederick A. Porter; Clerk, W. S. Choate; Census Superintendent, Elmer P. Spofford; James A. Place—all Republicans except Justice Strout.

Population.—The population in 1900, by counties, was as follows: Androscoggin, 54,242; Arrows took, 60,744; Cumberland, 100,889; Franklin, 13,444; Hancock, 37,241; Kennebec, 59,117; Knox,

4,406; Lincoln, 19,689; Oxford, 32,238; Penobscot, 76,246; Piscataquis, 16,949; Sagadahoc, 1,330; Somerset, 33,849; Waldo, 24,185; Washington, 45,232; York, 64,885; total, 694,487.

Finances.—The total receipts of the State treasurer for the two years ending Dec. 31, 1900, were \$3,798,923.03; amount of cash on hand, Jan. 1, 1900, \$154,726.73; amount disbursed during 1899 and 1900, \$3,754,767.75; balance on hand, Jan. 1, 1901, \$198,879.01. The State tax from



JOHN F. HILL,
GOVERNOR OF MAINE.

the average net rate of State tax on the 20 cities was \$1.56½ on each \$1,000 valuation; for towns and organized plantations the average rate was 66½ cents. The tax on savings banks for the two years was \$851,566.06; on railroads, \$323,052.32; on telegraph and telephone companies, \$32,888.48; on express companies, \$10,267; on insurance companies, \$131,405.62; on lateral inheritances, \$54,226.64; on new corporations, \$71,565; other taxes and miscellaneous items, \$308,284.28; a total of \$1,783,021.07. One hundred thousand dollars was paid on the public debt in 1899 and 1900, and the State's bonded indebtedness is now \$2,103,000, a reduction of \$16,300 since 1890. The State's outstanding temporary loans amount to \$350,000.

Education.—The total amount of the school and mill tax for 1900 was \$520,019; the amount of school money raised in towns was \$18,001, an increase of nearly 47 per cent. since 1890. The normal schools are flourishing, and about 30 per cent. of the public school teachers are normal school graduates. School improvement leagues have been formed throughout the State, and work in co-operation with the superintendents. There are nearly 10,000 of these leagues, and they have secured for the schoolhouses a large quantity of material, from a library to a trap basket, from an attractive playground with swings and trapeze to wash basins and clean windows. School savings banks have been established in some of the rural districts, and have met with marked success. In 8 schools, where the attendance was 245, the number of depositors was 130; pupils deposited more than \$1, and they have bank books. Deposits are rapidly increasing. In 33 unorganized townships schools have been maintained at a cost, the past year, of \$2,382.13. Many married persons avail themselves of the privilege thus afforded. The public schools have been maintained at a high standard, and much time and labor have been expended in enlarging and beautifying school grounds and rooms and providing libraries and works of art. The teach-

ers' institutes and summer schools have not only improved the standing of the schools, but have stimulated the teachers to attend the colleges.

There are 360 students in the State University. This institution offers special facilities in engineering and agriculture, and has courses in preparation for medicine, chemistry, and pharmacy, as well as thorough classical courses. In the past two years the trustees have built a drill hall, a gymnasium, and an astronomical observatory. The law school is at Bangor, and is proving successful.

Agriculture.—More than half the population is supported by farming, the market for their products being constantly enlarged by the popularity of the State's seaside and inland summer resorts.

The Prohibitory Law.—By comparing present conditions with those previous to the enactment of the "Maine law" fifty years ago, it is seen, says the Governor in his address, that in a large majority of country towns there is practical prohibition, and in the cities as uniform enforcement as of other legislation.

Banks.—On Oct. 27, 1900, the total assets of the 51 savings banks was \$71,076,211.67. The resources of the 17 trust companies were \$13,295,402.92. There were 180,914 depositors whose balance was less than \$2,000, and the total amount of their deposits was \$53,558,289.84; while the number of depositors having a balance of \$2,000 or more was 5,413, and the total amount of their deposits was \$13,681,809.23. The amount of tax paid on savings bank deposits in 1900 was \$448,827.93, an increase of \$128,434.21 over the sum paid in 1890.

The whole number of depositors in savings banks and trust companies, and shareholders in building and loan associations, was 213,980, a gain of 11,428 during the year. The Governor says: "If we take from this total the 6,019 demand depositors in the trust companies, it will be seen that nearly one third of the entire population of the State are directly interested in our various savings institutions. The aggregate amount of their capital, if apportioned among the people of the State, would give about \$125 to each person, or nearly \$600 to each family."

State Institutions.—At the Bath Military and Naval Orphan Asylum 24 orphans were admitted in 1900, the largest number for many years.

There has been a gradual increase in the number of patients in the Maine Insane Hospital, and it is overcrowded. Nov. 30, 1900, it had 771 patients, an increase of 38 in two years. A new hospital at Bangor is nearly completed.

The State Prison report shows that there has been a decrease of 37 in the number of convicts. The total gain from goods manufactured last year was \$5,937.74. As it cost an average of 9 cents a day to support a prisoner, the State paid \$106.66 more than it received as profit from the work. Other expenses amounted to \$10,092.19.

There are 60 boys in the Reform School housed in cottages under the best modern conditions, and 90 in the main building. The cottage system has proved its value, and more will be built.

The Industrial School for Girls has 165 girls under its care. Of these, 61 are in the school, 14 boarding out, 44 working for their board, and 46 receiving wages. They are taught the common English branches, and to sew and knit, do housework, and care for health and morals. Two buildings were destroyed by fire within a year, and one has been rebuilt and equipped.

Fish and Game.—The season of 1900 was the most successful in the history of these industries.

Including the amount paid to transportation companies, \$5,000,000 was expended by more than 50,000 visitors to the forests and lakes. The shore and sea fisheries employ 20,000 persons and have an invested capital of nearly \$3,000,000. The total value of the products, ready for market, is about \$6,000,000 annually.

Trade.—The State Board of Trade, at its semi-annual meeting, reported unprecedented prosperity. In the first two months of 1900 Maine shipyards launched 10,000 tons of new shipping, and every trade and business was sharing in the revival.

Railroads.—The Maine Central road had a year of exceptional prosperity. Its total receipts were \$5,698,666.26, and its expenditures \$3,753,971.53.

Political.—The Democratic State Convention was held in July. The platform accepted the national platform adopted at Kansas City, and pledged unqualified support to the candidates. On State issues it opposed the proposed creation of the office of State Auditor; favored abolition of the fee system, revision of the system of taxation, and election of railroad commissioners by popular vote; and declared that the prohibitory liquor law was a failure. Samuel L. Lord was nominated for Governor.

The platform adopted by the Republican State convention accepted the platform of the national convention and praised the administration of President McKinley. On State issues it favored readjustment of the taxation system, the creation of the office of State Auditor, and the construction of good roads; and it commended the public services of Gov. Powers and the Maine delegation in Congress. John F. Hill was nominated for Governor.

In the election the Republican ticket was successful by a plurality of about 33,000. The Legislature has 30 Republicans and 1 Democrat in the Senate, and 132 Republicans and 19 Democrats in the House.

On presidential electors the vote was 65,435 for McKinley, 36,822 for Bryan, 2,585 for Woolley, and 878 for Debs.

MANITOBA, PROVINCE OF. Government and Politics.—Toward the end of 1899 the province was greatly stirred with the political campaign. Mr. Greenway's government had been in power since 1888, and the prospect of defeating it appeared slight indeed. The Conservatives, however, had induced the Hon. Hugh John Macdonald (son of the late Sir John Macdonald) to accept the leadership in the contest. Mr. Greenway had with him in the Cabinet Messrs. J. D. Cameron, Robert Watson, C. J. Mickle, and D. H. McMillan. He had all the support that the Liberal Government at Ottawa could render. Opposed to Mr. Greenway was the revolt of Mr. L. R. Richardson, M. P., and the Winnipeg Tribune, of which he was proprietor, and of other discontented Liberals. Mr. Macdonald had the support of Sir Charles Tupper and the Hon. G. E. Foster, the Conservative Federal leaders, in a vigorous speaking tour, and the influence of his own extraordinary popularity. On Dec. 9, after the elections, the returns showed a new assembly of 22 Conservatives, 16 Liberals, and 2 elections to be held—which afterward gave one to either party. On Jan. 8, 1900, the Greenway Government resigned, Mr. Macdonald was called upon, and the following ministry was formed: Premier and Attorney-General, Hon. Hugh J. Macdonald; Provincial Treasurer and Minister of Agriculture, Hon. J. A. Davidson; Provincial Secretary and Minister of Public Works, Hon. D. H. McFadden;

ministers without portfolio, Hon. C. H. Campbell and Hon. James Johnson. R. P. Roblin, former leader of the party in the province, declined place in the new ministry. All the ministers, returning to their constituencies, were re-elected and when the Legislature met, on March 30, the Government had a compact and enthusiastic majority behind it. William Hespeler was elected Speaker, and the Hon. J. C. Patterson, Lieutenant-Governor, then read the speech from the throne in which he said:

"Two contingents of Canadian troops have already reached the scene of action, and a third, equipped at the expense of Lord Strathcona and Mount Royal, is now on the ocean, on its way to South Africa. The first contingent, which left our shores some months ago, has already received its baptism of fire, and, I am proud to say, has proved itself worthy to fight shoulder to shoulder with the most celebrated regiments in the British service. I deplore the death of Major Arnold, who commanded the Western company of this contingent, and of the many gallant men who fell with him in the battles of Modder river; but I recognize that, while dead, they are not forgotten, and that their memories will long be treasured by those who hold loyalty, courage, and the honor of the country dear.

"Legislation will be asked with a view to restoring that equilibrium in the finances which I regret to say, has not been maintained in the past, and it will be of a character which will, I believe, accomplish this difficult task. In pursuance of this object a bill will be introduced reducing the number of ministers receiving salaries to three. I regret to say that the Government is under the necessity of refusing to submit for your ratification certain orders in Council granting aid to certain railways. You will be asked to repeal the present costly and unsatisfactory election act, and to enact in its stead one much simpler, more just, and less expensive. The people of Manitoba have on two occasions declared themselves, by their votes, in favor of prohibiting the liquor traffic. The Government has decided to give effect to these views, in so far as the powers of the provincial Legislature will permit them to do so, and in dealing with this important subject will be submitted to you. My attention having been called by a regrettable accident in one of the laundries in Winnipeg which resulted in the death of a young girl, to the fact that in some of the factories here the machinery is left unprotected, and thereby the lives and limbs of the employees endangered, a bill will be submitted for your consideration dealing with the liability of employers in such cases, and also one dealing with factories and workshops, and providing adequate protection for the men and women therein employed."

The legislation that followed was mainly carrying out of pledges made by the new Premier. On Feb. 14, referring to the much-discussed railway matters, Mr. Macdonald had declared that "as to the railway corporations, the Conservative Government of Manitoba has no friends and no enemies. It will deal with everything on its merits from the standpoint of the people, and not with that alone in view." Between the time of the new ministry's assuming office and the opening of the Legislature various indications of readjustment on the part of the Greenway Government had come to light. Speaking at Emerson, Mr. Macdonald declared that on entering office they had made a discovery that almost took his breath away. Mr. Greenway, notwithstanding statements and pledges repeated by his colleagues and himself throughout the province, and by

that lines built last year had not cost the province one dollar, had passed orders in Council and written a letter promising a bonus of \$1,750 for every mile of new line built by the Canadian Pacific Railway last year. In the case of some of these lines, Mr. Greenway had merely written letters to the managers, saying that he had promised aid, and would have given it had he remained in power, and would support the Macdonald Government in paying it over. For other lines aid had been promised by orders in Council, with the knowledge of the whole Cabinet, and contracts were made subject to ratification by the Legislature. On considering the matter fully, he had come to the conclusion that the good faith of the province did not require that even bonuses promised by orders in Council should be paid; that there would be no breach of good faith, and the good name of the province would not suffer, by refusing to pay them, for he found an order in Council had been passed on July 14, when the Legislature was in session. There was plenty of time to pass a bill. A bill involving much larger amounts had been passed after that and before the close of the session—the Manitoba and Northwestern bill. But Mr. Greenway did not wish the electors to know that he was granting a bonus to the Canadian Pacific Railway and standing in with that company. It had struck Mr. Macdonald and his Government that the Canadian Pacific Railway must have been a party to the suppression of the facts and concealment of them from the province. The present Government had decided to refuse to pay these bonuses.

Meanwhile Mr. Greenway made a determined effort to retrieve himself. He declined a seat in the Senate, offered to him by the Dominion authorities, although his late colleague, Mr. R. Watson, accepted one, and the Hon. D. H. McMillan, in October, became Lieutenant Governor. He declared himself unwilling to let the "system of slander and falsehood" that had been adopted by the Conservative Government go unchallenged, and expressed himself as determined to retain the leadership of the provincial Liberals. Replying in more detail to the railway charges, he said: "If my Government is now to be condemned for that policy, condemnation should have been meted out to them a good many years ago, because that policy has been consistently pursued since the year 1888, when we came into office, and on account of which policy such a large mileage has been added to our railway system for the purpose, as I have time and again pointed out, of not only securing, as far as possible, competitive lines, but keeping in view the great need of the farmers for convenient marketing facilities. As will be remembered, this policy included the introduction of the Northern Pacific Railway, the Souris extension of the Canadian Pacific Railway, the Pipestone branch, the Foxstone branch, and the Belmont extension of the Northern Pacific, all of which have been aided on exactly the same plan of \$1,750 per mile, a policy in which the House was practically unanimous." As to the concealed order in Council, giving aid to the Canadian Pacific Railway on the Snowflake and Lac du Bonnet branches, he said: "In the former case, it was a matter that had been urged upon my Government for years and years by the settlers here, to relieve them of their hardships, and I had repeatedly interviewed the railway authorities, and made a promise of the usual bonus if they would build, and they finally agreed to the construction. As to the latter, a deputation of Winnipeg citizens waited upon me several times, urging the necessity of aiding the Lac du Bonnet

line for the purpose of being able to get out of that country the valuable wood and building material, and for colonization purposes. A promise for the usual aid was made to that deputation. This contract was made in the usual way as all others (including one for the building of a branch from the Dauphin Railway into Gilbert Plains country), all of which contracts were to be brought before the House at a future date for ratification."

A distinct demand from the Liberal press came for Mr. Greenway's resignation of the leadership, and one of his followers, Mr. C. A. Young, resigned from the Legislature as a protest against his acting any longer as leader of the party.

On April 4 a petition to the Dominion Parliament was passed in the Legislature by a unanimous vote. It asked that in pending legislation for railways, and all future legislation for railways to be built and constructed within the bounds of the province of Manitoba, Parliament would make provision: (1) For complete and more effectual control of rates thereon, including the fixing of maximum charges for freight and passengers; (2) the right of acquisition of such lines of railway by the province on equitable terms, based on the cost of construction, and in the event of the province and said railways being unable to agree upon the price so to be paid, the same to be determined by arbitration; (3) the right of the province to use such lines of railway in connection with any lines of railway that may hereafter be owned or operated by the province, the rental to be on equitable terms, determined as in the preceding paragraph; (4) that the province shall have the first option of purchase on any of the said lines of railway."

Mr. Macdonald and his colleagues next turned to the matter of the franchise, and in June introduced and carried a measure for the repeal of the existing law, which the Conservatives said had rendered it easy for unscrupulous men to tamper with the voters' lists and to interfere with a free expression of the popular will. The new elections act was framed largely upon the manhood suffrage system of Ontario. It gave the preparation of the voting lists into the hands of the municipal authorities, and provided for a revision by judicial officers. It abolished the system by which a property owner could vote wherever he owned property, and established the "one man, one vote" principle. A clause that was widely discussed provided that the recent Galician, Doukhober, and other foreign immigrants should not have a vote for seven years unless they could read in either the English, French, German, Swedish, or Icelandic language.

This session was the longest in the history of the province, and 82 bills, embodying much new legislation and amending much old legislation, were passed. The House finally adjourned on July 5, after a speech from the Lieutenant Governor, and his assent in the name of the Queen to a large amount of legislation, of which the following acts were the most important:

For the protection of persons employed in factories.

To amend the assessment act.

The Manitoba voters' list act.

The manhood suffrage registration act.

To amend the devolution of estates act.

To amend the public schools act.

Respecting the taxation of corporations and others for the purpose of supplementing the revenues of the crown.

Respecting mortgages and sales of personal property.

To incorporate the Selkirk Railway Company.

To incorporate the Winnipeg, Selkirk and Lake Winnipeg Railway Company.

To amend the Manitoba insurance act.

The liquor act.

To amend the shops regulation act.

Respecting writs of execution against land.

To amend the Lord's Day act.

Respecting real property in the province of Manitoba.

To consolidate and amend the acts relating to the property of married women.

Respecting the protection of game.

To incorporate Brandon College.

Prohibition.—One of the chief subjects of discussion in the province was Mr. Macdonald's prohibitory liquor law. Manitoba is strongly in favor of prohibition, and had voted in two plebiscites—a Dominion and a provincial one—in favor of the principle. Mr. Macdonald had declared before the election that, although not personally in favor of it, he would abide by a distinct expression of public opinion in the choice of representatives, and would present such a law if the majority of the new members were in its favor. When he became Premier he found that such was the case, and at once proceeded to put his pledge into operation. The measure was prepared by a leading Manitoba lawyer, Mr. J. A. M. Aikins, Q. C., and it prohibited the wholesale or retail sale of intoxicating liquors within the province as a beverage. The measure was introduced June 1, and appears to have been sufficiently definite and to have been really intended to effect the purpose aimed at.

The sale of liquor was to be permitted for use in arts, medicine, and sacraments only, although the act did not apparently aim to prevent absolutely its use in private hospitality. Druggists were placed under a stringent license law, with severe penalties, and the giving away of liquor in any public place, office, factory, hall, club, hotel, store, or house where there was a boarder or roomer, or a gathering of people, was strictly forbidden. The penalties were not less than \$200 and costs and not more than \$1,000 for the first offense—all offenses to be registered; for the second offense, not less than six months in jail nor more than two years. A corps of salaried inspectors was to be appointed, responsible to the Attorney-General's office, and they were to have power of search. While the province could not prevent importation of liquors for export or sale outside its boundaries, it was proposed to place a heavy tax upon such traffic. There were weighty protests, and the License Holders' Association presented a petition to the Legislature, claiming to represent an investment of \$2,000,000, and demanding compensation. On June 20 a large deputation waited on the Legislative Committee having the measure in hand and protested vigorously against it. F. H. Phippen, Q. C., made the principal speech. He declared that the bill was in no sense a prohibition measure, and that the only effect would be to drive the venders from the province to adjoining parts of Ontario or the Northwest Territories. The act, if passed, would not hinder any man from obtaining any quantity of liquor he might desire, the only change was that he had to buy outside of the province. This might be called prohibition if it were necessary to purchase in the Transvaal, but when people were allowed to buy from adjacent territories it was simply leaving licenses to other provinces. It placed liquor in every man's house, a bottle in every man's sideboard. The lighter beverages—wines and ales—would be prohibited, as the expense of importing them would be greater, and people would be driven to drinking heavier liquors. It had been said the present

law was not strictly administered; if so, there would be innumerable breaches of the proposed law, as every person would have an opportunity to carry on illicit business. The measure finally passed the House, with the approval of a great majority of the people, as shown by the press, the platform utterances, and the result of ensuing by-elections, in all of which the Government were sustained. It was not to become law until June 1, 1901, and a new development has since appeared in the protest of the Hudson's Bay Company and their claim that the legislation infringes the trading privileges granted them under Dominion enactment when the province entered Confederation. This point has been referred to the courts.

The Federal Elections.—Manitoba was greatly affected by, and in turn considerably influenced, the Dominion elections of October and November, 1900. Partly because Sir Charles Tupper had been for thirty years a chief supporter and friend of his father's, partly because Sir Charles had helped in the provincial elections, partly because he had been with him previously in Dominion politics, Mr. Hugh J. Macdonald consented in September to retire from the Manitoba premiership and help the veteran Conservative leader in the Federal campaign. Before definitely resigning, however, he accompanied Sir Charles and the Hon. George E. Foster in a tour of Ontario. In the later announcement that he was to be a candidate in the Liberal constituency of Brandon against the Hon. Charles Sifton, a clever member of the Dominion Government and the Liberal leader in the West, came one of the most dramatic incidents of the campaign. The battle in Brandon was keen and vigorous. It resulted in a victory for Mr. Sifton, and was one of the most significant Liberal successes of the campaign. For the time Mr. Macdonald retired from public life. His action necessitated his retirement from the Manitoba Government, and, on Oct. 29, a new Conservative ministry was sworn in, with R. P. Roblin as Premier and President of the Council, J. A. Davidson as Provincial Treasurer and Minister of Agriculture, D. H. McFadden as Provincial Secretary and Minister of Public Works, and the Hon. C. H. Campbell, Q. C., as Attorney-General, Railway Commissioner, and Minister of Education. Robert Rogers became a minister without portfolio, and Mr. Johnson retired from his similar place in the previous ministry. All the new ministers were re-elected.

Finances.—The financial situation in Manitoba, as shown on Dec. 31, 1899, indicated receipts of \$776,234 and expenditures of \$972,462 for the current year. The former sum included the Dominion subsidy of \$483,687, interest on school lands of \$23,196, land title fees of \$65,786, liquor licenses \$27,487, miscellaneous receipts making up the remainder. The chief items of expenditure were \$155,691 charged to the Finance Department, \$154,508 upon education, \$101,128 upon agriculture and immigration, \$59,780 paid to the Canadian Pacific Railroad and \$100,500 to the Northern Pacific, \$124,516 charged to the Attorney-General's department and \$187,524 to the Public Works Department. The gross debt of the province was given as \$8,190,688, and against this was a Dominion debt allowance of \$3,707,196. The position of the province in a financial sense was not satisfactory when the Macdonald Government took office. It was declared by the Conservative that Mr. Greenway's legacy in this connection included a bonded indebtedness of \$2,500,000, drainage debentures of \$300,000, unpaid railway subsidies of \$148,000, bank overdrafts of \$80,000, unpaid school grants of \$100,000, unpaid election expenses of

\$30,000, a federal subsidy of \$240,000 used to replace trust funds, and railway bonds of \$300,000 secured owing to the release of lands held as security. Early in the session of the new Legislature Messrs. G. H. Halse, C. A. Kennedy, and Campbell Bartlett were appointed a commission to inquire into the state of affairs. Their report, presented on May 9, somewhat diminished the unpleasant character of these charges, but left much that was not capable of adequate explanation. They reported that they found the amount of the bank overdraft on general account to be \$6,036, the amount of trust funds used for general purposes to be \$15,485, and the amount of unpaid liabilities to be \$156,613. The commissioners said they found that the employees of the Government entrusted with the handling of public funds had not been required to furnish bonds, and the securities for investments made by the Government had not been kept in joint custody. In connection with the management of the Treasury Department, they reported that certain transactions appeared to have been irregular.

School Lands and Education.—For many years a much discussed question had been the right to direct provincial control of certain school lands valued at about \$300,000 and held in trust by the Dominion Government. In the Dominion session of 1899 a measure had passed the Commons providing this amount of money over to the province but the act was rejected by the Senate, mainly on the ground that it would go into the hands of a Liberal ministry in Manitoba and be used as part of its general funds rather than utilized for the benefit of education. In June, however, Mr. Macdonald took up the old issue in behalf of the province, and a resolution was passed by the House of Assembly which, after reference to a previous memorial addressed to the Dominion Parliament on April 10, 1899, declared that, "in the opinion of this House, the time has arrived when the lands held by the Federal Government for school purposes in this province and the funds derived from the sale or other disposition of any of the same should be handed over, for the future administration thereof for such school purposes in manner as to the said province may seem advisable." No action has yet been taken by the federal authorities.

An interesting point came up about this time in connection with the school regulations of the province as they affected the Roman Catholic minority, and the compromise of the famous Manitoba school question between the Laurier Government and the Greenway Government at Winnipeg in 1897. It was really an effort to reopen the controversy, and early in June a deputation of the Catholic schools committee waited on the premier with a strong protest against the existing condition of affairs. Mr. Macdonald replied by letter as follows:

I have given careful thought and attention to your question, and I am sorry to say that I fear it will be impossible to meet the wishes of the Catholic majority which waited upon me. The public have been informed, both by Sir Wilfrid Laurier, the premier of the Dominion of Canada, and the Hon. Thomas Greenway, who at the same time was premier of the Province of Manitoba, that this long question was settled, and that the settlement had been reduced to writing and made law by the amendment to the school act which was passed in 1897."

An effort was then made to obtain relief from the legal disabilities at Ottawa, but Sir Wilfrid Laurier refused to take further action. The latest available statistics of education in Manitoba are

for 1898, and show the existence of 1,250 schools, 1,301 teachers, a school population of 57,431, an average school attendance of 24,958, and pupils numbering 44,070.

Agriculture.—For several years the farmers of Manitoba have complained of what was called the elevator monopoly—a practical protection accorded by the Canadian Pacific Railway to elevator owners, by which encouragement was given to the building and maintaining of these elevators in such a way as to place the shipping of grain at important points almost entirely in their hands. No one could ship grain in bulk, on cars, except through the elevators, and the capacity of the latter had to be at least 25,000 bushels, thus doing away with small warehouses. The system destroyed competition in buying, and the farmers complained of various charges and exactions which they deemed unfair. A commission of inquiry was appointed, and on April 4 it reported to this effect: "We consider that proper relief from the possibility of being compelled to sell under value and being unduly docked for clearing is only to be had by giving the fullest obtainable freedom in the way of shipping and selling grain. The law should require railways to furnish cars to farmers for the shipping of their own grain, and should allow the establishment at shipping points, if required, of flat warehouses, under proper regulations, by means of which a farmer who can not conveniently load on cars direct can, for a comparatively small sum, obtain for a limited number of days the use of a bin of the capacity of a car load. Though the furnishing of cars to farmers has been given as a privilege, they should with proper restrictions enjoy it as a legal right."

The crops of 1899 in this province exceeded all previous production. Wheat yielded 27,922,230 bushels; oats, 22,318,378 bushels; barley, 5,379,156 bushels; potatoes, 3,226,395 bushels; and various kinds of roots, 2,670,108 bushels, with a scattering production of flax, rye, and peas. The total was, in round figures, 62,000,000 bushels, against 53,000,000 in 1898. The number of horses in Manitoba in 1899 was 102,655; of cattle, 220,248; of sheep, 33,092; of swine, 66,011. The beef cattle exported were 12,000 in number, the stockers 3,500, and the total value of dairy products was \$470,559. In 1900 the crops were good, but exact figures were not available at the time of writing.

MARYLAND, a Middle Atlantic State, one of the original thirteen, ratified the Constitution April 28, 1788; area, 12,210 square miles. The population, according to each decennial census, was 317,728 in 1790; 341,548 in 1800; 380,546 in 1810; 407,350 in 1820; 447,040 in 1830; 470,019 in 1840; 583,034 in 1850; 687,049 in 1860; 780,894 in 1870; 934,945 in 1880; 1,042,390 in 1890; and 1,190,050 in 1900. Capital, Annapolis.

Government.—The following were the State officers during the year: Governor, J. Walter Smith; Secretary of State, Wilfred Bateman; Comptroller, Joshua W. Hering; Treasurer, Murray Vandiver; Adjutant General, John S. Saunders; Attorney-General, Isidor Rayner; Superintendent of Education, M. Bates Stephens; Commissioner of Insurance, Lloyd Wilkinson; Commissioner of Public Lands, E. Stanley Toadvin—all Democrats; Chief Judge of the Court of Appeals, James McSherry; Associate Judges, David Fowler, A. Hunter Boyd, Henry Page, I. Thomas Jones, John B. Briscoe, Samuel D. Schmucker, and James A. Pearce; Clerk, Allan Rutherford—all Democrats except Schmucker and Rutherford, Republicans.

Population.—The following table exhibits the population of the State by counties, as deter-

mined by the decennial census, compared with similar returns for 1890:

COUNTIES.	1890.	1900.	Increase.
Allegany.....	41,571	53,694	12,123
Anne Arundel.....	34,094	40,018	5,924
Baltimore.....	74,909	90,735	17,846
Baltimore city.....	434,439	506,957	74,518
Calvert.....	9,860	10,223	363
Caroline.....	13,908	16,248	2,345
Carroll.....	32,376	38,380	1,484
Cecil.....	25,351	24,662	*1,189
Charles.....	15,191	18,816	3,125
Dorchester.....	24,843	27,962	3,119
Frederick.....	49,512	51,920	2,408
Garrett.....	14,213	17,701	3,488
Hartford.....	28,998	32,229	724
Howard.....	16,269	16,715	446
Kent.....	17,471	18,736	1,315
Montgomery.....	27,135	30,451	3,266
Prince George.....	26,090	29,398	3,318
Queen Anne.....	18,461	18,364	77
St. Mary.....	15,819	18,136	2,317
Somerset.....	24,155	25,923	1,768
Talbot.....	18,736	20,342	606
Washington.....	39,752	45,133	5,381
Wicomico.....	19,830	22,332	2,522
Worcester.....	19,747	20,365	1,118

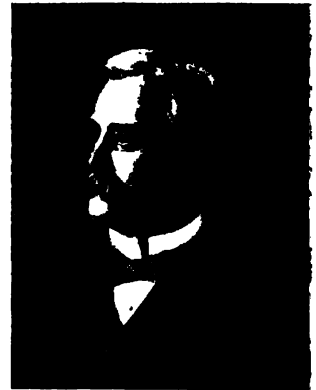
* Decrease.

Finances.—According to the report of the Comptroller for the fiscal year ending Sept. 30, 1900, the total treasury receipts were \$3,622,493.42, which, together with the balance of \$707,926 in the treasury on Sept. 30, 1899, and \$206,326.80 to the credit of the funds account, makes a total of \$4,536,746.22. The disbursements aggregated \$3,480,534.26, being \$169,189.81 less than in 1899. This decrease is accounted for by the fact that there was paid during the fiscal year of 1899 to the "consolidated loan of 1899" \$522,579.14, which was the proceeds of the bonds issued. The receipts for 1900 to the sinking funds, including the balances to the credit of those funds on Sept. 30, 1899, aggregated \$686,587, and are held in the sinking funds for the benefit of the loans mentioned, as follow: Consolidated loan of 1899, \$523,587; penitentiary loan, \$113,000; insane asylum loan, \$25,000; general sinking funds, \$25,000; total, \$686,587; deduct balances Sept. 30, 1899, \$374,813.18; actual receipts, \$311,773.82. The funded debt was shown to be at the close of the fiscal year \$6,309,326.13, an increase of \$600,000. This increase is accounted for by the issue on Jan. 1, 1900, of the remaining \$300,000 of the "consolidated loan of 1899" for the completion of the Fifth Regiment Armory, as authorized by the Legislature in 1898, together with the issuing on July 1, 1900, of a part of the "State building improvement loan," amounting to \$300,000, and authorized by the Legislature in 1900. As an offset to this interest-bearing debt, the State holds bonds, stocks, and cash aggregating \$3,424,057, leaving the net debt on Dec. 30, 1900, \$2,885,269.13.

River and Harbor Improvement.—The National Government authorized the expenditure of \$221,000 for the improvement of Spring Gardens Channel in Baltimore, with an appropriation of \$88,000 for the coming fiscal year. The total cash appropriation for the harbors of Maryland amounted to \$113,000, and in addition to the improvement of Spring Gardens Channel there was authorized the expenditure of \$5,000 each for Cambridge, Rockhall, Queenstown, Clayborne, and Breton Bay. The appropriations for the improvement of the rivers in Maryland were as follow: Choptank river, \$8,000; Chester river, from Crumpton to Jones's Landing, \$5,350; Warwick river, \$2,000; Pocomoke river, \$3,000; Elk river, \$10,000; Patuxent river, \$6,000.

Coal.—The total coal production of the year 1900 was 3,900,000 tons, against 5,080,248 tons in 1899. The value of this coal was \$4,173,000, compared with 1899, when the production was valued at \$4,318,211. The coal in 1900 was worth on an average \$1.07 a ton at the mine, while in 1899 it was worth only 85 cents a ton at the mine. The reduction in the output was due to the strike of the united mine workers, which lasted four months. The mine workers demanded 60 cents, but failed, and after four months of idleness returned to work at 55 cents a ton. An inadequate car supply interfered with the shipments of coal subsequent to the resumption of work. The shipments of coal over the Baltimore and Ohio Canal during the season aggregated 175,000 tons, compared with 192,423 tons in 1899.

Mason and Dixon's Line.—In 1900 the resurvey of the famous Mason and Dixon's line was begun by the United States Coast and Geodetic Survey, under the authority of a resurvey designated under the acts of Pennsylvania and Maryland for 1899 and 1900. It was to be made without expense to the States, but \$5,000 was appropriated by each State to be devoted to the expenses of subordinate members of the survey to the purchase and location of the monuments, and other contingent expenses connected with the actual remarking of the line. The history of the original running of the famous Mason and Dixon's line was the result of an agreement between the Calverts and the Penns, concluded in 1760, after protracted negotiations. There had been a conflict in the grants of Maryland and Pennsylvania, and there were other complications affecting the titles.



JOHN WALTER SMITH,
GOVERNOR OF MARYLAND.

The Penns were fortunate in having friends at court, and Calvert was finally coerced into conceding everything Penn demanded. The original grant to Calvert placed the northern limit of his domain at the fortieth parallel, while the grant to Penn placed his territory north of Maryland. The map of Virginia made by John Smith represented the fortieth parallel as running below the head of the navigable waters of the Susquehanna, and it was urged by the Penns that the spirit of the grant, based upon the assumption that Smith's map was used, should be followed rather than the letter of the charter, which permitted Lord Baltimore to govern the inhabitants of the principal settlement in Penn's colony. On the other hand, the Calverts insisted upon the letter of the grant. A compromise resulted, and the claim for a portion of Pennsylvania was abandoned by Lord Baltimore. At that time a commission was appointed to survey the line between the two colonies, but its progress was so slow that Charles Mason and James Dixon were engaged to complete the work. They arrived in Philadelphia in November, 1764, and began their survey in the following spring. They continued work two years, reaching a point 244 miles from Delaware river and 36 miles short

of the northwest corner of Maryland, when their Indian guides left them, and they abandoned the work, which was completed many years afterward by other surveyors. Mason and Dixon did their work with the utmost care. Through the forests they cut a "vista" 8 feet wide, and set up a stone at the end of each mile. Every fifth stone was larger than the others, and had on the north side the arms of Thomas and Richard Penn, and on the south face the arms of Frederick, Lord Baltimore. The intermediate stones have the letter "P" on the northern and "M" on the southern surface. These stones were hauled as far as Fort Frederick, in Washington County, and it was found impossible to carry them farther through the mountains. The removal of many of the historic landmarks left the boundary line between Maryland and Pennsylvania in doubt in places; and it is to remedy this, as well as to perpetuate the historic line, that provision was made for the resurvey.

Legislative Session.—The regular biennial session of the Legislature began on Jan. 3, and continued until April 2. As elected, the Senate consisted of 15 Democrats and 11 Republicans, and the House of Delegates 65 Democrats and 6 Republicans. The Senate chose as its President John Hubner, Democrat, in preference to Stephenson A. Williams, Republican, while Lloyd Wilkinson, Democrat, was named Speaker of the House in preference to James De B. Walbach, Republican. There were 1,421 bills presented before the Legislature, of which 790 were passed by both houses. Among the more important measures that were enacted are the following:

Organizing the Board of Police Commissioners of Baltimore by taking the election of commissioners out of the Legislature, legislating the present board out of office, and giving the Governor the appointment of the board. The term of office is two years, and one of the three members must belong to the minority party.

Creating a Board of Police Examiners, consisting of 3 members, to be appointed by the Governor, with a salary of \$800 each, and with authority to appoint a clerk at \$1,200. This board is to examine applicants for places on the force, and all appointments to the force except marshal and chief of detectives are to be made from lists furnished by the Board of Examiners.

Increasing the present force by 80 policemen, 10 detectives, and 1 lieutenant of mounted police. This bill will increase the cost of the police department more than \$75,000 a year.

Authorizing an increase in the number of directors of the United Railways Company of Baltimore. It has a clause protecting the rights of the city, and requiring the principal office to be in Baltimore.

Repealing the clause of the new charter which authorizes the street car companies to charge 3 cents for transfers, and re-enacting it so as to require free transfers to be given under certain restrictions.

Appropriating \$3,000 annually, and empowering the Governor to employ an expert to examine the books of officials who have to account with the State treasury, and also those of institutions receiving State aid. This is the so-called State auditor bill.

Reducing the price of gas in Baltimore from 25 to \$1.10 for 1,000 feet.

Reorganizing the boards of county school commissioners, and requiring new boards to be appointed by the Governor.

Requiring employers to give employees time to

Creating a board of charities to hear all applications for State aid by charitable and educational institutions.

Amending the charter of Baltimore, by authorizing the Mayor and Council to abolish the Water Registrar's office, and in several other particulars.

Giving the city three fourths of the money received for the liquor licenses paid by the clubs in the city.

Taxing spirits in bond. This is to meet the decision of the Court of Appeals declaring a former law invalid.

Two constitutional amendments which, if approved by the people, will give the city of Baltimore another legislative district, one additional Senator, and six delegates.

Creating the office of State Superintendent of Education, with a salary of \$3,000 and expenses.

Political.—In the election in November the vote for the presidential electors was as follows: Republican, 136,212; Democrat, 122,271; Prohibition, 4,582; Social Democrat, 908. Out of a total vote of 264,511, the Republican candidates received a plurality of 13,941. Six representatives for Congress were voted for with the following results: First District, William H. Jackson, Republican, who received 19,714 votes, against John P. Moore, Democrat, who received 18,173; Second District, A. A. Blackeney, Republican, 27,710, as against J. F. C. Talbott, Democrat, 27,420; Third District, Frank C. Wachter, Republican, 21,641, as against Robert F. Leach, Jr., Democrat, 19,570; Fourth District, Charles R. Schirm, Republican, 21,932, as against J. W. Denny, Democrat, 20,149; Fifth District, S. E. Mudd, Republican, 20,866, as against B. H. Camalier, Democrat, 17,305; and Sixth District, George A. Pearre, Republican, 23,541, as against Charles A. Little, Democrat, 20,161.

MASSACHUSETTS, a New England State, one of the original thirteen; ratified the Constitution Feb. 6, 1788; area, 8,315 square miles. The population, according to each decennial census, was 378,787 in 1790; 422,845 in 1800; 472,040 in 1810; 523,159 in 1820; 610,408 in 1830; 737,699 in 1840; 994,514 in 1850; 1,231,066 in 1860; 1,457,351 in 1870; 1,783,085 in 1880; 2,238,943 in 1890; and 2,805,346 in 1900. Capital, Boston.

Government.—The State officers during the year were: Governor, William Murray Crane; Lieutenant Governor, John L. Bates; Secretary of State, William M. Olin; Treasurer, E. S. Bradford; Auditor, John W. Kimball; Attorney-General, H. M. Knowlton; Secretary of the Board of Education, Frank A. Hill; Secretary of the Board of Agriculture, James W. Stockwell; Insurance Commissioner, F. L. Cutting—all Republicans; Chief Justice of the Supreme Court, Oliver Wendell Holmes; Associate Justices, Marcus P. Knowlton, James M. Morton, John Lathrop, James M. Barker, John W. Hammond, and William C. Loring.

Population.—The population of the State, according to the Federal census of 1900, is 2,805,346—a gain in ten years of about 25 per cent. Of the 14 counties, 12 show gain and 2 decrease. The figures, by counties, for 1890 and 1900 are as follow:

COUNTIES.	1890.	1900.	COUNTIES.	1890.	1900.
Barnstable..	29,172	27,886	Hampshire..	51,859	58,820
Berkshire ..	81,108	95,667	Middlesex..	431,167	565,696
Bristol	186,465	252,029	Nantucket ..	3,268	3,006
Dukes	4,369	4,561	Norfolk	118,950	151,539
Essex	299,995	357,030	Plymouth...	92,700	113,965
Franklin	38,610	41,209	Suffolk	494,780	611,417
Hamden	135,713	175,603	Worcester..	280,787	346,958

Of the 33 incorporated cities in Massachusetts, 8 have between 12,000 and 20,000 inhabitants, 5 have between 20,000 and 25,000 inhabitants, and 20 have more than 25,000 inhabitants. All the 20 principal cities show an increase in population since 1890, the largest percentages being 53.5 for Somerville and 53.2 for New Bedford, and the smallest (5.9) for Gloucester. Boston, with 560,892 inhabitants in 1900, shows an increase of 25 per cent. since 1890, which is a slightly higher rate of increase than that for the preceding decade, when it was 23.6 per cent. Worcester, the second largest city in the State, had a population in 1900 of 118,421, compared with 84,655 in 1890, constituting an increase during the ten years of 33,700, or 39.8 per cent. Fall River, with 104,863 inhabitants, is the third city in the State, and shows an increase since 1890 of nearly 41 per cent. Lowell, with 94,969, and Cambridge, with 91,886 inhabitants, rank fourth and fifth among the cities of the State, the next largest city being Lynn, with a population in 1900 of 68,513.

Finances.—The gross debt of the State is divided into two classes—the indebtedness for which the whole State is directly liable and the indebtedness for the payment of which certain cities and towns are liable. These two classes of indebtedness may be described as the actual State debt and the contingent debt. From each of these classes of indebtedness must be deducted the accumulations in the sinking funds applicable to them, in order to show the net actual State debt and the net contingent debt. The actual State debt is made up of the following loans: Abolition of grade crossings loan, \$8,000,000; Fitchburg Railroad securities loan, \$5,000,000; harbor improvement loan, \$500,000; Massachusetts Hospital for Consumptives loan, \$172,500; Massachusetts Hospital for Epileptics loan, \$270,450; Massachusetts war loan, \$1,230,000; Medfield Insane Asylum loan, \$1,025,000; metropolitan parks loan, series two, \$1,512,500; State highway loan, \$3,100,000; four Statehouse loans, \$6,185,000; Boston, Hartford and Erie Railroad loan, \$973.30; total actual State debt, \$26,996,423.30.

The sinking funds applicable to the actual State debt are: Abolition of grade crossings loan sinking fund, \$718,147.11; Fitchburg Railroad securities loan sinking fund, \$10,000,000; Boston, Hartford and Erie Railroad loan sinking fund, \$973.30; harbor improvement loan sinking fund, \$71,660.28; Medfield Insane Asylum loan sinking fund, \$220,559.85; prison and hospital loan sinking fund, \$41,906.26; State highway loan sinking fund, \$283,333.99; Statehouse loans sinking fund, \$3,858,031.85; Massachusetts war loan sinking fund, \$97,644.21; total, \$15,292,256.85.

One of the Statehouse loans (\$2,335,000) will become due July 1, 1901, and will be paid out of the Statehouse loans sinking fund.

The contingent debt is as follows: Armory loan, \$1,400,000; metropolitan parks loans, \$8,317,500; metropolitan sewerage loans, \$8,265,912; metropolitan water loan, \$21,000,000; total, \$39,043,412.

The accumulations in the sinking funds applicable to the payment of the contingent debt are: Armory loan sinking fund, \$435,718.67; metropolitan parks loan sinking fund, \$467,288.13; metropolitan sewerage loan sinking fund, \$454,520.57; metropolitan water loan sinking fund, \$1,573,619.72; total, \$2,931,147.09.

Of the net contingent debt of \$36,112,264.91, \$34,652,264.91 is to be paid by the cities and towns in the metropolitan water, parks, and sewerage districts. This sum will be increased many millions by loans already authorized but not yet issued.

The Statutes.—In 1896 a commission was pointed to consolidate and arrange the statutes. The work has been completed, and is in the hands of the printer.

Education.—The public schools were kept open in 1900 on an average nine and a half months a month and a half more than the law requires. The expenditure for school support, exclusive of buildings, was \$10,677,486; for buildings, \$3,175,757. Of the total expenditure for both purposes all but \$275,849 came from local taxation. The local taxation for school support amounted to \$3.62 for each \$1,000 of the State's valuation, the same as in 1899; for school buildings, to \$1.01 or 21 cents less than in 1899.

In the spring a fund of \$50,000, guaranteed by Harvard University, was raised for the purpose of bringing 2,000 Cuban teachers to attend the Harvard Summer School, and that number of teachers came. Phillips Brooks Memorial Hall was kept open for the exclusive use of the woman teachers, with a Spanish-speaking matron in charge. Most of the instruction was given in Spanish.

By the will of the Hon. Dorman B. Eaton Harvard University has a bequest of \$100,000, to found a professorship of the science of government. The States that had more than 100 students in the university in 1900 were: Massachusetts, 2,441; New York, 430; Ohio, 155; Pennsylvania, 141; Illinois, 148; Maine, 121.

Civil Service.—The Civil Service Commissioners report an increase in the number of applicants examined for the classified public service of the Commonwealth and the cities. There are now under the protection of civil service rules about 8,000 public employees, with an aggregate compensation of, approximately, \$8,000,000. The Governor recommends that the Legislature give the commissioners more authority to deal with violations of the law.

The Insane.—In his message, Gov. Crane says there is urgent need of additional accommodations for the increasing number of the insane in the hospitals and asylums. These institutions are now so crowded that it is necessary to make up every night in the corridors and day spaces about 1,000 cot beds. The State care act provides that the State shall assume, Jan. 1, 1904, the support, so far as possible the care, of the insane who reside in the city and town almshouses. This covers now numbers about 900. The increase in the population of the insane hospitals and asylums during the past ten years has averaged about 10 per cent. annually. The Board of Insanity, in its report, recommends the adoption of a policy to reduce overcrowding by 100 each year, and at the same time to provide for the annual increase of 300.

The Statehouse.—The cost on construction account of the Statehouse extension is \$3,522,313.37 for the restoration of the Bulfinch front, \$3,496.37; cost of lands purchased, \$1,669,859.88; cost of furniture, \$576,446.93; total cost of land, buildings, and furniture, \$6,104,116.97. The Governor says: "All the bills have been paid, and the expended balance will be quite sufficient to cover the cost of the paintings and the completion of the Memorial Hall."

Political.—At the election, in November, following State officers—all Republicans—were chosen: Governor, Winthrop Murray Crane; Lieutenant Governor, John L. Bates; Secretary, William M. Olin; Treasurer, Edward S. Bradford; Auditor, Henry E. Turner; Attorney-General, Hosea M. Knowlton. To the Executive Council 7 Republicans and 1 Democrat were chosen. The Senate consists of 32 Republicans and 8 Democrats; the House of 177 Republicans, 60 Democrats.

ats, and 2 others. Of the 13 Congressmen elected, 9 are Republicans. The vote on presidential electors gave McKinley, 239,495; Bryan, 156,507.

METALLURGY. Iron and Steel.—Having mentioned the part played in the industrial evolution of the world by the iron and steel metallurgists as evident to all, Sir W. C. Roberts-Austen said in his address at the meeting of the Iron and Steel Institute that the fact that they have contributed with commensurate success to the advancement of pure science is less generally known. He therefore spoke of some of the instances in which this had been the case. The carbonization of iron offered the first example in which the diffusion of solids in solids had been observed. The study conducted by metallurgists of the associations of carbon and iron afforded the most complicated case yet known, and indeed the only one which had been worked out, of metallic solid solutions. It presented, moreover, a unique instance of the importance of allotropy in connection with metals. Metallurgists had carefully investigated, and conducted daily operations of vast industrial importance, in which the presence of a third body enabled either elementary bodies or compounds to react on each other. Habitually conducting operations at high temperatures, which often invited ordinary chemical reactions, had led to the acquisition of a mass of information as to the reactions that occur and of the compounds that are formed under such conditions. Pyrometric records had, moreover, enabled the equilibrium of the less fusible metals in their liquid as well as in their solid state to be studied—a branch of work which chemists generally have not been in a position to undertake. The necessity of submitting physical and mechanical properties of iron and alloys to rigorous tests as a routine operation works has afforded a rich store of information as to the molecular constitution not only of metals, but of matter generally. Metallurgists have to do with cases in which a mass of metal is acted on by added matter in proportions that are minute to intervene directly by the formation of chemical compounds with the whole of the mass, while in some cases no compounds are formed. The influence of the atom must, therefore, be more or less directly exerted. The author believed that the most comprehensive view possible to take of the achievements of British metallurgists was to be found in the reports of the French investigators and experimenters adopted of concise expression in the brief statement that the main characteristic of the metallurgical work of the century had shown the interdependence of minute quantities of matter on the properties of metal in which they are hidden. The author's work had, moreover, to a great extent, revealed the way in which the small quantities of added matter act, and it had been shown that they exert profound influence even in solid metals. The fact that certain varieties of steel are "solid solution" is now accepted, and the recognition of molecular movements in solids has become a fact. In no branch of the work had the outcome of such knowledge been more striking than in the case to which all the members of the Institute were in different ways devoted. Metallurgists had again and again shown that no dependence could be placed on the once famous maxim of the chemist, *de la Rochefoucauld* that those who apply themselves too much to little things commonly become incapable of great ones. The influence of the apparently little on the obviously great is now recognized, and the result is remarkable. By adding small amounts of matter to iron, the metallurgist has literally made it possible to change the aspect of the world.

Speaking of the several universal expositions that have been held in Paris, the author said that the progress made in the successive periods between them might be indicated by the three words, "novelty," "quantity," and "quality." In 1855 the metallurgy of iron and steel was almost stationary, and technical workers were seeking fresh guidance. In 1867 the results of new efforts were shown in the improvements contributed through the labors of Bessemer, Martin, Siemens, Cowper, and Armstrong. In 1878 the extraordinary development of the new processes had attained was shown, and the quantity of the new products was remarkable. Then came the period during which the quality of material improved, and the metallurgical exhibits in 1889 showed that a high point of perfection had been reached.

The Grondal-Dellwick method of magnetic concentration of iron ores is used with great success at Pitkäranta, Finland. Magnetite is worked there in large quantities, but the presence of sulphides—copper pyrites and zinc blende—unfit it for use unless these minerals can be removed. To do this the ore is first finely crushed in a net-crushing ball mill. The separator consists of two rotating cylindrical portions—the separator proper and the discharging drum. The former comprises four circular electro-magnets, with ends separated by brass rings, but brought together at the shaft. The discharging drums consist of eight concentric rows of soft iron pins, set in a wooden drum. Pulp is conveyed to the magnets, which attract the magnetic part, while the nonmagnetic part flies away. The points of the discharging drum receive temporarily induced magnetism as they approach the magnets. The result of this arrangement is that particles of iron ore adhering to the magnets are transferred to the former. Whenever these iron points recede from the magnets they lose their induced magnetism, the grains drop off, and are thus delivered to a separate trough, by means of which they are carried away. The process is automatic, and one workman can look after several separators.

In a paper on the use of finely divided iron ore obtained by concentrating processes, Prof. J. Wiborg, of Stockholm, said that the advantage arising from magnetic and other methods of separation was very largely qualified by the circumstance that the product or concentrate was usually obtained as a comparatively fine powder, which limited its utility to the smelter when compared with that of similar or even poorer ores obtained in large masses. The question, therefore, of how such material could best be applied was now becoming of importance. The author showed how this concentrate could be utilized by direct addition to the charges in the blast furnace by agglomeration previously to charging as a refining or softening material in the open-hearth furnace, and for the production of sponge iron for use in the open-hearth furnace. The paper concluded with an account of a furnace the author had designed for reducing pulverulent ores.

A new mechanical apparatus for casting sandless pig iron is described by Mr. R. Wainford, of Stoke-on-Trent, as capable of maintaining a good crystalline fracture equal to that of the pig iron made in sand beds at a very reduced cost of production. It is competent to deal with 60 tons of iron per hour; and, assuming that the workmen have eight-hour shifts, the labor cost is about a half penny per ton cast.

From results obtained in his regular business practice rather than from laboratory experiments, Mr. Charles James has found that in annealing white iron the only change effected is one of con-

dition in the carbon, a large proportion of which passes from the combined into what is for convenience called the graphitic state, although the condition is different from that of graphite either as found free in nature or as modified out from gray iron during cooling. The substance is an allotropic form of graphite corresponding with what Ledebur has called "tempering graphitic carbon," and differs from graphite and from amorphous carbon in specific gravity, specific heat, and calorific power. It can, however, be separated from the iron and chemically determined in the same manner as graphite. The author found, contrary to a statement of Ledebur that iron containing this allotropic graphite hardened and tempered exceedingly well, and when not fully developed by overannealing the whole of the carbon will pass into the hardening state and leave the iron without a trace of free carbon. By prolonged heating this allotropic form becomes changed into graphite identical with that found in gray iron, when it occupies a similar position in the iron structure and is very injurious to the physical qualities of the material. The effect of other components of iron on the carbon change has been investigated by the author as to silicon, manganese, and phosphorus. Silicon and manganese exert great influence upon the carbon during the annealing process. The presence of silicon is a necessary condition of the change. Indeed, the relative amount of carbon that can be changed from the combined to the graphitic state during annealing seems to be directly proportionate to the amount of silicon present. The influence of manganese is not so readily marked as that of silicon, and its action is further obscured by the high silicon which always accompanies high manganese. Comparatively high manganese, however, assists the change and shortens the time necessary for its completion. The action of silicon is apparently of an essentially different character from that of manganese. That of silicon is direct upon the carbon, while the influence of manganese is only indirect through the silicon by protecting it from oxidation during the melting of the iron, and so causing the percentage of silicon in the casting to be higher than it would be if the manganese had been more completely oxidized from the bath. In every case irons low in silicon and manganese are practically worthless after annealing. Such irons may be softened by the process so as to machine easily, but are always deficient in tenacity. They generally have a white fracture, in appearance like that of a 30-per-cent. carbon Bessemer steel bar. Low carbon—at least comparatively low carbon—does not prevent the change in the carbon condition from taking place. This change can also be produced by the author's method of annealing in other combinations of iron and carbon than white iron. The carbon change described, though gradual, was found to be coextensive throughout any given section of the casting.

The results of the researches of Dr. A. Stansfield into the solution theory of carburized iron are that carbon is less soluble in iron when presented in the form of graphite than when presented in the form of cementite, and that the apparent reversal of this in steel is due partly to the absence of nuclei of graphite, on which further deposits might take place; partly to the length of time required for the separation of the graphite, involving as it does the gradual passage of carbon through the iron to reach the nuclei; and partly to the mechanical pressure which must oppose the formation of graphite in solid steel.

In his experiments on the effect of aluminum

on carbon in cast iron, H. W. Waldron has observed that, as compared with silicon, traces of aluminum have a greater effect in producing graphite in the material, although the whole of the carbon is never thrown down as such by as occurs with silicon when present in act quantities. With less than 0.5 per cent. of silicon practically no separation of graphite takes place. A few comparative tests showed that 0.35 per cent. of aluminum reduced the resistance by nearly 60 per cent. when slowly cooled, and that further quantities still rendered the metal soft, but not quite so much so. Rapid cooling increased the resistance by compression of those alloys, but not in anything approaching the original strength of the cast iron.

One of the features of the Paris meeting of the Iron and Steel Institute was a demonstration by Mr. J. E. Stead, of Middlesborough, of the way in which iron is affected by phosphorus, more especially in conjunction with carbon. According to the late Dr. Percy, there are at least several definite chemical compounds of phosphorus in iron. The way in which carbon drives out phosphorus was illustrated in a manner which might possibly lead to further important results. Mr. Stead pointed out that the white constituent of gray iron was formerly looked on as carbide, but it had been proved to be phosphide. He exhibited a highly phosphoric specimen of iron having crystals from $1\frac{1}{2}$ to 2 inches across. He explained how, following the researches of Sir W. Roberts-Austen and of Dr. Stansfield, he accounted for brittle and imperfect steel by the formation of a eutectic alloy. The substitution of carbon for phosphorus led him to suppose that pieces of steel might be welded together without pressure by placing plates of steel together with layers of phosphide between, and he had succeeded in obtaining this result. He explained, however, that the junction was more in the nature of a brazed joint than a weld.

From experiments with wrought iron and various steels exposed to sea water, river water, and the weather for two periods of about a year each, H. M. Howe has drawn the conclusion that the difference in the rate of corrosion between wrought iron and soft steel is rarely enough to be of moment, except in the case, perhaps, of marine steam boilers; and that the ratio of corrosion of given soft steel to that of given wrought iron may vary greatly with the conditions of exposure. In view of the widespread belief that wrought iron oxidizes less readily than soft steel, the author puts forward a theory, based on the different protective powers of the "cinder" or "scale" flake in wrought iron and the cementite flakes in soft steel, to explain the discrepancy between the results and the results obtained in his experiments.

The question of the most desirable form of steel ingot for gun tubes and propeller shafts was discussed at the spring meeting of the British Iron and Steel Institute in a paper by Mr. F. J. Carulla. Although the circular form of ingot possesses many advantages, it has the serious drawback of being liable to develop skin cracks during cooling. The author said that the octagonal ingot said to have been used in the gun factories at Woolwich, was a sounder form, but a hexagonal was better, and a square section the best. The form of ingot which had come into use, but not generally as its merits deserved, was a hexagonal section with concave sides, each of which offered the resistance of the arch to pressures arising from within, and which are set up by the expansion of the metal in cooling.

The Taylor-White tool-steel process in use

the shops of the Bethlehem Steel Company, while the details of it have not yet been published, is understood to be a special heat treatment of a peculiar brand of self-hardening tool steel. It is said to be exceedingly simple and inexpensive, and is automatic in action. The process is applied after the tool has been dressed to shape, and the effects of the treatment penetrate through the steel. It has been applied to a number of standard tool steels with increase of their efficiency, but the best results are obtained from a special composition. Steel treated by this process has the quality of retaining a degree of hardness at a red heat, and it is possible for tools made of it to cut at a speed great enough to heat the point of the tool to redness. Cutting steel with a tool thus treated leaves an unusually smooth finish on the work, thus greatly decreasing the labor of finishing. This special steel forges so readily that tools of difficult and irregular shape can be made from it. A simple rapid method of annealing the steel has been found by which tools may be easily machined to shape, making it applicable to twist drills, chasers, inserted cuttings, etc.

The investigations of Mr. A. L. Colby, as described by him in a paper read before the American Section of the International Association, go to show that small percentages of copper have no deleterious effect upon the physical properties of steel. Experiments made with steel containing 0.565 per cent. of copper upon strength and elongation resulted satisfactorily, as also did those with high carbon steel having a similar copper content. Bars containing this proportion of copper responded well to bending and quenching tests, but some bars bent transversely to the direction of rolling developed cracks. The material was successfully welded. Experiments were referred to which showed that copper has little tendency to segregate from a steel ingot. The author thinks that good steel may contain as much as 1 per cent. of copper without suffering, provided only that the sulphur content is not too high, in which case the metal is liable to crack in rolling. But even if the proportion of sulphur is as large as 0.05 per cent. in steel in which as much as 0.75 per cent. of copper is present, there is not much danger of its cracking while being rolled.

The progress in the use of mild steel for shipbuilding purposes, said Mr. B. Martell before the Institution for Naval Architects, may be judged from the fact that while in 1876 7 steel vessels, of 4,470 tons, were classed in Lloyd's Register, and 435 iron vessels, of 517,692 tons, the record for 1885 showed 113 steel vessels, of 165,437 tons, as compared with 260 iron vessels, of 290,429 tons. As wood was superseded by iron as a material for shipbuilding, so in its turn iron has given place to steel. Of the total output of the United Kingdom during the past year (1899), 98.8 per cent. of the tonnage was built of steel and 1.1 per cent. of iron. The iron tonnage was principally made up of trawlers, and comprised no vessels of more than 303 tons. Experience has shown that where proper care is taken to cleanse and paint the surface thoroughly, the deterioration of steel is not appreciably greater than that of iron. In some parts, however, such as the deck plating and plating of inner bottoms and floors under boilers, steel appears to be more liable to deteriorate, and in consequence of this iron is often used in those parts of vessels otherwise constructed of steel.

In respect to microscopical analysis in steel industries, Mr. C. H. Ridesdale has expressed the opinion that the stage has been reached when from the time of receiving a sample it can be sectioned, ground, etched, examined, photographed,

and worked into a finished print in about two hours. This is less time than that in which the analysis for carbon, silicon, phosphorus, and manganese is performed, to say nothing of sulphur, microscopic examination, and other evidences. Mr. Alfred Harvey remarked in a discussion of Mr. Ridesdale's paper that the special point on which microscopical examination gives information was the particular heat treatment to which steel had been subjected, and it was in this branch that more assistance might be expected than in any other.

The breaking of a rail at St. Neots station on the Great Northern Railroad of England into 17 pieces, in 1895, led to the appointment of a committee of experts to investigate the question of the loss of strength in steel rails caused by prolonged use. Each member of the committee took a special feature of the steel, with particular reference to this rail, as the subject for his investigation. The St. Neots rail was found to be of ordinary composition, and under the mechanical tests of variable, but on the whole good, quality. Its defects were brought out by microscopical examination. Good rail steel, according to Roberts-Austen, consists of ferrite, or iron free from carbon, and pearlite, a combination of alternate bands of ferrite and cementite. Well-developed pearlite with a conspicuous banded structure is characteristic of a good rail steel. When, however, steel is hardened by quenching the pearlite disappears, and the whole mass consists of interlacing crystalline fibers devoid of banded structure, and is called martensite. Sir W. C. Roberts-Austen says concerning this, that "the detection of martensite in a rail should at once cause it to be viewed with extreme suspicion, as showing that the rail is too hard locally to be safe to use." In the St. Neots rail a surface layer about $\frac{1}{16}$ of an inch thick existed, in which the carbide was in the form of martensite. Martensite was also found in small patches in some other worn and broken rails, but to a far less extent. In the inquiry as to how far this structure could account for the brittleness of the rail, it appeared that the rolling surface of the St. Neots rail was traversed by a number of transverse cracks of various depths. The upper surfaces of rails are subject to tension over chairs by the weight of passing trains applied between the chairs, and cracks are formed in this way. It was found that a heavy steel rail nicked with a chisel to the depth of $\frac{1}{4}$ of an inch broke under the impact of 600 weight let fall from a height of 12 feet, while the same rail, if not previously nicked, resisted successfully the fall of a ton from the height of 20 feet. The loss of strength due to these minute cracks is therefore amazing, and is accounted for by supposing that shallow nicks are readily induced by shock to spread through the mass. Yet as minute transverse fissures are, according to Prof. Unwin, common on the surface of old rails, while few of them break on the road, it must be rare for them to spread into the substance of the rail. All old rails become "hammer hardened" on the surface by long use, and their strength and percentage of elongation may be increased by annealing, but no clear case of any production of martensite in this way could be obtained, and what induced its formation in rails was not clearly determined. Roberts-Austen quotes an experiment which points to the probability that local heating of a rail by skidding, followed as it would be by rapid abstraction of the heat by the mass of the cold rail, can produce patches of martensite. Though the investigation is not definitely satis-

factory, one of its results is the illustration it affords of the fact that steel possesses a complex structure that can be studied with the microscope; that this structure varies greatly with the mechanical and thermal treatment to which it has been subjected; and that the durability of the rail depends on its structure. It was found from the mechanical tests that rails generally break near their ends, "owing to greater straining action due to discontinuity at the joint," and that the fish joints are an unavoidable source of danger.

The limonites, or "brown iron ores," which are used almost entirely in Virginia, and to a large extent in Tennessee and Alabama, are found principally in the valley along the Appalachian mountains extending from Canada to middle Alabama. The deposits, while they can not be called seams, are generally found along certain definite lines, the ore occurring in lenticular masses, sometimes overlying and sometimes alone, but always inclosed in clay. On account of its intimate association with clay, this ore universally requires washing to fit it for the furnace. The irregularity of the size in which it occurs (from the size of a pinhead to boulders weighing several tons), the richness of the material, and the sand rock or "white horse" encountered are mentioned by Mr. J. C. Foster as some of the uncertainties to be contended with in working the ore. The percentage of iron varies widely in different localities from an average of not more than 45 per cent. in Pennsylvania and Virginia to an average of 50 per cent. in the furnace at Sheffield, north Alabama, and adjacent parts of Tennessee; and within this monthly or yearly average it ranges greatly from day to day.

Among the conditions enumerated in an article in the *Chemiker Zeitung* as indispensable for a protective coating for iron ships that shall meet the requirements of service are that the composition should protect the ship's hull from corrosion; that it should form a smooth surface, so as to decrease the friction; and that it should dry quickly, so that the cleansing of the submarine parts of the hull and the application of a double coating can be done in a single day. In new steel vessels the black scale on the plates must be removed before applying the coating. Preference is given among the paint compositions which have been used for this work to that proposed by Rahtjen, which consists of a solution of shellac in spirit as the vehicle, with iron oxide and a small proportion of linseed oil, for the first or insulating coating, and the same materials with the addition of arsenic and quicksilver for the second coat. These compositions are highly commended for their permanency—for the shellac vehicle is but little acted upon by the salt of the sea water. The attachment of marine growths to the hull is prevented by the slow action of the sea water on the mercury of the second coating, causing the formation of the poisonous mercuric chloride. These paints have the further advantage of drying quickly. Their defects arise from the smallness of the quantity of mercury that can be incorporated and the gradual decrease of their effectiveness through the slight solubility of the shellac. Copper and mercury have been found the best mineral poisons to incorporate with the paints.

The most severe tests of the durability of preservative paints for iron work, as described by Mr. Harry Smith before the Newcastle section of the Society of Chemical Industry, consists of painting shallow dishes with the pigment and filling them with water, which is allowed to evaporate slowly. The red lead paints came best out of this trial, being practically unaffected. The

zinc whites and white leads came next. All the other paints suffered badly, boiled oil the worst. When painted iron slips were merely exposed to the weather, and when the slips were constantly immersed in water, the results were similar. Good iron oxide was not far behind the lead and zinc paints. Iron oxide makes a tougher paint than red lead, and is, further, more convenient to use. Zinc white is preferable to white lead. The Forth Bridge ironwork is cleaned and painted outside at intervals of three years with a mixture of red lead and iron oxide paint, followed by a finishing coat of brown oxide paint. Where the salt water sprays the ironwork, this is scraped and painted once a year.

Gold, Silver, and Platinum.—Speaking in the Institute of Mining and Metallurgy on the readiness with which a little grease affects the conditions of gold washing, W. S. Welton remarked that the mere touch of a speck of gold with the finger will cause the gold or sand to rise to the surface of water, where it continues to flow. The effect is apparently brought about by a minute portion of grease from the fingers becoming attached to the particles. The disastrous effects which may be produced in amalgamation of gold or silver by a minute particle of oil, petroleum, or resin in the water are remarkable. These substances appear to be specially attracted by gold and mercury, and for this reason, at hydraulic mines, it has been found necessary to prohibit washing clothes, dishes, etc., in ditches and streams, and dumping into ditches and sluices. Mercury contaminated with grease or resin becomes sluggish in running. Comparatively large grains of gold will float upon its surface without becoming amalgamated. The brightness of the metal is changed to a dull lead color, and it will "flour" easily. Distillation will not purify mercury from grease or resin, for that goes over too. The author has found great benefit from washing mercury in a strong solution of potash obtained by leaching wood ashes. Flouring and "sicken-ing" are thus overcome, and the yield of gold is much increased.

In the process of J. Diether and M. Merz for winning gold from refractory ores the ores are mixed with alkali sulphide and sulphur, or with substances that yield those products when heated, and the mixture is raised to a red heat, which is kept up for a short time. It is then leached out with water, sulphur being added if necessary. The gold is precipitated together with a gelatinous mass of colloid material or in a pulverulent condition, and may be separated by means of a filter press or otherwise.

Telluride or other ores in which the gold is or appears to be combined with such an element as tellurium, antimony, or arsenic are treated in a patented process at the Golden Link Consolidated gold mines in closed vessels with a sufficient quantity of a weak solution of a polysulphide of an alkali or alkaline earth metal, to dissolve the tellurium and other bodies without extracting any gold. When heated to from 100° to 200° C. in the closed vessel, and thus exposed to the combined action of heat and pressure for from one to two hours, the action should be complete, especially if agitation is resorted to. The solution contains the tellurium, which may be recovered from it, and should have extracted no appreciable amount of gold. The residue containing the whole of the precious metal may, after washing, be treated with a cyanide solution or otherwise.

In May's gold extraction process, the ore after being crushed is exposed to the action of a solution of caustic alkali or alkaline carbonate con-

nined in specially designed vats, heated by waste steam, and kept in a state of agitation for from one to three hours. By this means the extraction of the total gold contents from refractory ore was greatly facilitated. Ores, slimes, etc., after being subjected to the action of the chemicals, are ready for treatment by amalgamation.

It has been observed by W. Witter that at a gold mill in the province of Småland, Sweden, where the water used in the stamp mill is taken from a river running from peat moors, while the amalgamation of the ores takes place without difficulty in seasons of full water, at periods of low water and when the weather is dry the copper plates are covered with a green slime, which almost prevents the mercury from taking up any gold. This effect of the water remained, notwithstanding all methods employed to counteract it, so soon as the green slime was rubbed off the plates it formed again rapidly, and it finally became necessary to stop amalgamation during the dry season. Yet experiments made in the laboratory at Hamburg with exposure of bright copper plates to the water led to no result.

In a course of Cantor lectures before the British Society of Arts on the nature and yield of metalliferous deposits, Mr. Brewster H. Brough said of gold, that in 1898, of a total product of £57,000,000, the Transvaal produced 27.6 per cent., Australasia 22.5 per cent., the United States 22.1 per cent., Russia 8.8 per cent., Canada 4.8 per cent., Mexico 3 per cent., India 2.7 per cent., and China 2.1 per cent. Thus the Transvaal, Australasia, and the United States together produced 72 per cent. of the whole. In view of the present conditions and prospects, the lecturer concluded that there were no signs of failure in the world's gold production.

For the treatment of gold and silver containing considerable quantities of zinc, for which ordinary retorts are not suitable, B. Sadler has patented a peculiarly constructed retort. It has a body of fire clay or equivalent material with its inner face coated with a sintering substance adapted to combine chemically under suitable firing with the fire clay and also with the basic material. This sintering substance may also be applied to the exposed parts of the outer surface of the retort. A further lining or coating of basic material is then applied to the fire clay. The entire body is subjected immediately before using to a temperature ranging about 1,500° for two or three days. With a retort of this nature the ore after roasting can be satisfactorily freed from zinc by distillation, while the gold, silver, copper, iron, and about 60 per cent. of the residue are left in the residue, which, being oxidized and containing some carbon, is suitable for treatment in a smelting furnace. The patentee defines the essential feature of his process the conduct of the distillation under such conditions as to exclude the corrosive action and mischievous chemical combinations which would result if the retort or corrosive agents had access to the fire or other ingredients of the retort for which they have chemical affinity, and in combination with which their action would be destructive.

The German official tests for silver-plated goods are by chromate and sulphide reagents. The chromate reagent is a mixture of equal weights of potassium bichromate and nitric acid. A drop of this liquid on the plated surface leaves a brown stain on the silver. This reagent, even in dilute form, is not available when the coating of silver is very thin. The sulphide reagent is a 5-per-cent. solution of sodium disulphide. A drop of this should leave a gray stain, but the

results are often very doubtful. A. Munkert proposes dissolving the layer of silver from the goods and testing the solution. The best solvent is a mixture of 10 cubic centimetres of concentrated sulphuric acid with 5 drops of pure nitric acid, both acids being free from chlorine. The metal to be tested is cleaned with alcohol and ether or chloroform, and is then placed in a dry test tube and covered with the acid mixture. The silver coating dissolves readily in the cold, and when the color of the underlying metal is clearly visible the acid is poured off, diluted with twice its volume of water, and one or two drops of dilute hydrochloric acid 1:10 are added. The extent of the turbidity viewed against black paper is to some extent an indication of the quantity of silver, but in the case of large articles the silver may be estimated quantitatively.

Of 165,000,000 ounces of silver extracted in 1898, Mexico produced 34.4 per cent., the United States 33 per cent., and Australasia 7.3 per cent. Less than half the world's supply was obtained from silver ores. The remainder was procured from the metallurgical treatment of other ores in which silver was an accessory constituent. Since these ores would continue to be mined for the other metals they contained a steady supply of silver was assured, while a slight rise in the price of silver would enable many deposits of true silver ores now untouched to be worked.

The only places where platinum is known to occur in North America otherwise than as a mineral curiosity are in California, Oregon, and British Columbia. Many reports of its occurrence were not substantiated when Mr. D. T. Day made his investigation of the subject. Although a number of deposits are known on the Pacific coast, the platinum in them is very fine and difficult to save. Most of the platinum product has come from inland diggings, where the grains are closer, particularly from the placers of the American river and those in Plumas, Shasta, Trinity, and Siskiyou Counties, California. These occurrences confirm the idea that the platinum originates in the serpentine rock in which the region abounds, for the platinum-bearing gravels are sure to be associated with some prominent serpentine ridge. The value of platinum metals in a large number of the platinum-bearing gold sands of California and Oregon ranges from nil to \$1,034 per ton. They contain generally less platinum than gold, but occasionally more, even up to three times the quantity, platinum being generally less than the other platinum metals, in proportions ranging from one sixth to one half.

Aluminum.—Speaking in the Franklin Institute of recent advances in the aluminum industry, Prof. Joseph W. Richards said that in the line of pure metallurgy, or reduction and refining, there was little to chronicle. The process of reduction had certainly been somewhat improved in details, but in principle it was the same as the Hall process of ten years ago. The operators of the process were naturally averse to publishing the details of their method, but it might be said that all the items of expense had been gradually notched down, so that the cost price of the metal had been reduced to about 20 cents a pound, while its selling price was a little more than 30 cents in the United States and 25 cents abroad. As was proved by certain instances adduced by the author, aluminum has become cheaper for almost every practical purpose for which it can be used than all the common metals excepting zinc, lead, and iron. In verifying this statement it should be borne in mind that aluminum is only about one third the weight of these other metals, and that

It is the cost of one third of a pound of it that is to be compared with the cost of one pound of them. The labors of metallurgists in searching for light strong alloys of aluminum are bearing fruit in abundance. Aside from its color, aluminum resembles copper in many of its qualities, and especially in that both metals are soft and rather weak, susceptible of being greatly hardened when alloyed. Five per cent. of copper, nickel, or manganese or 30 per cent. of zinc added to aluminum make strong metals as rigid as bronze, yet only one third as heavy. Such light, strong, good casting and machining alloys have an extremely large field of usefulness. An alloy principally of aluminum and zinc, selling at the same price per pound as pure aluminum, is hard and white, of specific gravity 3.1, melts clean, runs fluid, makes beautifully sharp and perfect castings, turns and machines like the finest brass, polishes well, and is fully as strong as gun metal or the best of the ordinary bronzes. The use of aluminum for culinary utensils is extending steadily. These vessels are described as possessing all the advantages of copper utensils, with none of their disadvantages. They need only as much attention as ordinary tinware to keep them bright and clean. Aluminum, on account of its harmlessness, is superseding zinc for fruit-jar caps. It is winning an important place in the artistic branch of lithographic printing, for which aluminum plates offer considerable advantages over lithographic stone. Electric conductors can now be laid more cheaply in aluminum than in copper. While the aluminum wire has, in order to give equal conductivity, to be one fourth as large again in diameter as a wire of copper, it weighs only one half and costs only two thirds as much as the copper wire it replaces. Long-distance transmission lines and trolley feed wires are being set up in aluminum as fast as the makers can supply the metal. Aluminum can be rolled out to $\frac{1}{3200}$ of an inch in thickness, and then beaten out to $\frac{1}{1600}$ or even $\frac{1}{7000}$ of an inch. As thin sheet it has found some application in place of cardboard for business cards, etc., but as leaf it has entirely superseded silver leaf in decorating. This leaf can be ground to powder, and in that condition is used by printers for silvery printing, and as a paint. For the latter use it is simply mixed with a varnish like ordinary bronzing powders. Powdered aluminum has recently received an extremely interesting metallurgical application in the reduction of refractory metallic oxides to the metallic state.

In a paper on the same subject, also in the Franklin Institute, Mr. J. A. Steinnetz undertook to enumerate the uses of aluminum that have proved satisfactory and extensive, with a view of encouraging further applications along kindred lines, and to speak words of caution regarding improper uses of the metal. His list of useful applications includes those mentioned by Prof. Richards and some others, among which are the making of patterns, for which, when stiffened by the addition of about 5 per cent. of zinc and a like amount of copper, aluminum forms an excellent substitute for brass, with the advantage of the great difference in weight, and for models and salesmen's samples. At the author's suggestion it had been used instead of wood for making models for castings, with excellent results in freedom from defects to which wooden models are liable. It has been found an excellent material for making steam-jacketed kettles and caldrons for boiling fruit juices, honey, and wax, and for certain acid work for which the peculiar qualities of the metal well adapt it. But it is not suitable for bath tubs and plumbing fixtures or for any pur-

poses in which it is exposed to the action of the alkali of soaps. In the powdered condition aluminum furnishes an excellent material for photographic flash lights, being cheaper than magnesium powder and free from the unpleasant smoke that accompanies the use of that metal.

The principle underlying a new method of producing high temperatures, described by Mr. E. F. Lange at the autumnal meeting of the Iron and Steel Institute, is based upon the heat energy developed by the chemical action of aluminum upon oxygen, or that between aluminum and certain metallic oxides. The practicability of the process was shown by the welding together during the meeting of two short lengths of heavy girder rails. Besides opening up another field for aluminum, the new method promises to be of considerable importance in engineering work. In the discussion of Mr. Lange's paper, Sir W. C. Roberts-Austen pointed out the extreme precision with which the reduction took place, and Sir Lowthian Bell dwelt on the value of the process if it should prove that carbonless iron could be obtained by it for electrical purposes.

Metallurgy by means of secondary electrical furnaces is the name which Herr Goldschmidt, of Essen, has given to a process of reduction by aluminum for which no extraordinary heat is required. It has been found useful in the preparation of metals employed in the manufacture of special varieties of steel. In the preparation of metallic manganese, for instance, the binoxide of that metal is mixed with pulverized aluminum, a substance capable of deoxidizing it and setting the metallic manganese free. The reaction is brought about whenever any point of the mixture is raised to the temperature of ignition, and will go on of itself, just as in the case of a mixture of oxygen and hydrogen, or of an explosion of gunpowder, without its being necessary to make any further application of heat. In the process of abstracting oxygen from the metallic oxide, the aluminum disengages a considerable quantity of heat, and the mass under treatment is raised to a dazzling white so that the aluminum oxide melts into a mobile liquid, while the melted manganese collects in the bottom of the crucible. A temperature is reached approaching that of the electrical furnace. Besides manganese, chromium, tungsten, molybdenum, and vanadium have been prepared within a few months through the reduction of their oxides by aluminum. By virtue of the character of the process, metals thus prepared are absolutely free from carbon, a feature of great value in their application to the improvement of steel. In this they have a distinct advantage over the same metals prepared in the electrical furnace which contain carbon. Besides metals available for use, the secondary electrical furnace furnishes aluminum oxide in the form of a very hard corundum or emery, which is sold for a polishing and grinding powder. The high temperature of the reactions in this process can be applied to the soldering and brazing of metals. Easily reducible oxides, like those of lead and copper, give explosive reactions with aluminum.

Copper, Nickel, Tin, and Zinc.—The electro-deposition of copper is now carried on, according to Mr. Sherrard Cowper-Coles, in many large engineering works for the production of large copper vessels. Most of the copper used by electrical engineers, and more than one third of the total copper output of the world, is now electrolytically refined. The demand for electrolytic copper is on the increase, and the capacity of most of the electrolytic refining works has been or is being enlarged. According to estimates published in In-

ustries and Iron, the world's total output of electrolytic copper fifteen or twenty years ago did not exceed from 15 to 20 tons a week. In 1881 and 1882 this amount was increased by the erection of new refineries to about 60 tons. In years succeeding several American refineries began operation, and between 1888 and 1890 the world's total production was between 280 and 300 tons per week. Since that time a very large number of refineries have come into existence in different countries, and it is safe to estimate the world's production at the present time as not less than 10 tons per day, or about 180,000 tons per annum. During the refining of this quantity of metal not less than 20,000,000 ounces of silver and 100,000 ounces of gold are recovered. Converted into a money value, these weights represent \$45,000,000 of copper, \$12,500,000 in silver, and \$2,000,000 in gold.

Of the physical properties of electro-deposited copper, the same authority said, in a lecture before the Institution of Electrical Engineers, that copper prepared by electrolysis may have a density as high as 8, while the density of normal copper is 8.9. Cold rolling, cold hammering, and hard drawing increase the tensile strength and limit the elasticity of copper considerably. The extensibility of annealed copper becomes less at high temperatures, and that of mechanically worked copper becomes higher. Some copper sheets (not annealed) deposited by the electrolytic centrifugal process, 0.0245 of an inch in thickness, broke at 3 pounds, which is equivalent to 22.1 tons per square inch. Hard-drawn wire made by this process has a tensile strength of 29 tons per square inch, and annealed wire 20 tons, the electrical conductivity being 99 per cent.

Of the recent improvements in the production of electrolytic copper, having in view both increase of the deposit and smoothness and homogeneity, one of the earlier plans for increasing the output was that introduced by Elmore, in which an agate finisher was caused to pass continuously over the surface on which the deposit was being made. The metal of very great strength was thereby obtained. In a more recent development a sheepskin impregnated with animal fat is used as a burr. In a method introduced by Mr. Sherrard Cuyper-Coles, the copper is deposited upon a vertical mandrel, which is caused to rotate very rapidly. The centrifugal force developed and the flow of the electrolyte over the rotating surface keep it clean and free from gas, making a smooth dense deposit nearly certain.

The physical tests of metallic nickel, as Mr. David H. Browne shows in a paper on The Properties and Possible Uses of Nickel Steel, furnish an explanation of its remarkable effects when alloyed with iron. The most notable of these effects is the manner in which nickel increases the elastic limit of the steel to which it has been added, and the effect exhibited in the much greater resistance which the metal develops against numerous and repeated strains; or, in other words, in the extension of the limit at which molecular fatigue begins, distinguished from molecular distortion, which is effected by the addition of the small percentage of nickel. This is the property that emphatically distinguishes nickel steel from simple steel. After discussing the advantages of nickel steel for bridge construction, for plates for boiler and tank work, ships' hulls, armor plates, shaftings and forgings, Mr. Browne mentions as among the purposes for which the alloys of that name are applied resistance wire, bicycle tubing and spokes, stay-plates, fire-box sheets, boiler tubing, firearms, safes, vaults, bobbin spindles, and a great variety

of other purposes for which some peculiarity of strength, ductility, or incorrodibility gives it special fitness. One of the most promising of these uses is the making of tool steel. For this purpose the alloy containing about 0.80 per cent. carbon with 3 per cent. of nickel is probably the best for everyday use. Increasing the nickel to 5 or 6 per cent. increases the strength, but necessitates skilled treatment in forging. Tool steel with 0.80 per cent. carbon and from 3 to 5 per cent. nickel possesses all the properties of high carbon simple steel without its brittleness. Nickel steel shows very pronounced toughness. A nickel-steel tool containing 4 or 5 per cent. of nickel with 0.80 per cent. carbon is as hard after tempering as the best simple tool steel of from 1 to 1.25 per cent. carbon without the brittleness and glassy nature which distinguish the latter. When used for drills the nickel steel appears to work with much less than the usual friction, and does not become so hot in use as carbon steel. Nickel steels are exceedingly sensitive to heat treatment, but are less easily spoiled by overheating, and may therefore be worked at a somewhat higher temperature than a carbon steel that will give the same temper.

A molecular transformation of tin organ pipes, under which the metal crumbled to a gray powder, was first noticed in 1851 by Erdmann. It was observed again by Fritzsche at St. Petersburg, and has since been studied repeatedly by various observers. The matter has more recently been taken up by Messrs. Cohen and Van Eijik, who in a preliminary dilatometric study of a gray tin discovered the existence of a transition temperature at about 30° C. A transition element was therefore constructed, having gray tin as one electrode and ordinary white tin as the other. A study of the electro-motive force of this cell with varying temperatures showed that the reaction, gray tin to white tin and white tin to gray tin, was a reversible one, with a transition point at 20° C. A careful determination of the same point by the dilatometric method gave the same value. All the observations of early workers are brought into line by this research. The authors point out that, except during a few warm days, all tin is in an unstable equilibrium, and tends to transform itself slowly into the gray powder modification.

Three commercial methods for the extraction of zinc are defined by Capt. C. C. Longridge in a paper on that metal and its treatment. They are the dry, or most usual process, by reduction, distillation, and condensation, by which metallic zinc is obtained; the chemical, a little-used method, which results in the formation of zinc compounds from which the metal has to be won in the dry way; and the electrolytic process, which is more or less in an experimental stage. Not only ores, but furnace and refinery products, furnace or retort residues containing zinc ore, calcined silver ores rich in zinc, and alloys of zinc with lead, silver, and gold are treated by the dry process. In many cases zinc extracted from ores or by-products by the dry process is too impure. Refining is accomplished by slow fusion at the lowest possible temperature, the melted metals being retained in this state for a considerable time, while the lighter impurities rise as scum, the heavier metals sink to the bottom, and the purified zinc forms a middle layer. This process has been improved in this country by the utilization of natural gas.

The chemical or wet process is characterized by the author as unsuitable and costly. Its use is chiefly confined to separating zinc from valuable alloys, etc., and converting it into marketable by-

products. The solvents mainly employed are sulphuric acid, hydrochloric acid, ammonia, ammonium carbonate, magnesium chloride, calcium chloride, carnallite, etc.

The electrolytic method is attended by obstacles that have so far not been surmounted. Among them are the enormous amount of power required and the difficulty of producing compact zinc. This method promises better for treating alloys, and is said to be carried out in a secret process at Aaron Hirsch's works at Inselberg in the Harz; and it has been applied to zinciferous pyrites, which, after treatment for the production of sulphuric acid, are intended for use as iron ore.

Mr. H. Van F. Furman, in a paper on zinc and its treatment, after remarking that extraction by electrolysis of molten compounds has not so far been attempted on a commercial scale, although numerous methods for accomplishing it have been proposed, says that most of the zinc as it comes from the adapters is sufficiently pure after skimming in the ladles to cast into bars ready for the market. Such scrap metal as is produced and any zinc which contains too high a percentage of lead is remelted with stirring, and then allowed to settle, when the lead collects at the bottom of the kettle.

In some places zinc ores are treated for the production of marketable zinc products, such as zinc oxide (zinc white), mixtures of zinc oxide, lead oxide, and lead sulphate (pigment), or zinc sulphate (zinc vitriol). For these processes ores are selected which are not generally suitable for the extraction of metallic zinc, either because they contain other valuable or detrimental qualities or because the percentage of zinc in them is too small. The production of zinc white from the New Jersey (franklinite) ores has been brought to a high state of perfection by the earlier inventions of Samuel C. Wetherill and the later ones of his son, J. P. Wetherill. The ores, which are mixtures of franklinite, willemite, zincite, and a calcite gangue containing various minerals and silicates, are passed over Wetherill magnetic separators, and a fairly clean franklinite and a mixed or middle product of franklinite and various iron and manganese silicates are obtained. The tailings from the separators pass to wet jugs, when the willemite and the zincite are removed from the silicate. The concentrates from the Wetherill machines are sent to the zinc-oxide works, and the concentrates from the jugs (principally willemite), which carry about 50 per cent. of zinc, are sent to Germany for distillation into a very pure spelter. The residues from the treatment of the franklinite in Wetherill furnaces after collection of the zinc oxide in bags, gathered from the pipes and other parts of the furnace, contain from 1.2 to 6 per cent. of zinc, and as they are rich in iron and manganese, they are smelted in blast furnaces for spiegeleisen.

In the Bartlett process in use at Cañon City, Col., ores containing 20 per cent. of zinc, after being crushed, are mixed with pea coal and dust coal and blown up in a blast furnace to drive off the lead and the greater part of the zinc and sulphur. A cinder is formed containing the silver, gold, and copper in a matte mixed with more or less slag. This cinder is smelted in an inclined low blast furnace with suitable ores to produce a high-grade matte. The zinc in this charge may reach from 15 to 20 per cent., and is mostly driven off as fume. The fume from the "blowing up" furnace and from the blast furnace is caught in bags, mixed and refined in a suitable furnace, whereby carbon, arsenic, sulphur, and other impurities are eliminated and a pure white pigment

is produced, suitable after being ground in oil to be used as a white-lead substitute.

Alloys.—Experiments have been made by Sergius Kern with a number of nickel-bronze alloys, with a view to the production of castings suitable to be used in mechanical work, especially for different fittings in high-pressure marine boilers. The alloys rusted very slightly, and in several cases proved preferable to steel castings. The nickel castings from the alloys designated as No. 1 and No. 2 especially gave very good results when mechanically tested. Alloy No. 1, having the composition copper 70 per cent., nickel 17.5 per cent., and zinc 12.5 per cent., corresponds to the rules prescribed by the English Admiralty for shipbuilding steel. In the cast state it gave a tensile strength of 26 tons and 23 per cent. elongation in 2 inches; fracture fibrous; and to the bending test, 67° over a radius of 1½ inch. Alloy No. 2, having a composition of copper 70 per cent., nickel 20 per cent., and zinc 10 per cent., corresponds to the English Admiralty rules for steel castings. It has a tensile strength of from 28 to 35 tons per square inch and an elongation of 15 per cent. in a length of 2 inches. Its fracture is fibrous, and its response to the test for bending strength gave from 35° to 40° over a radius of 1½ inch. The drop tests were likewise satisfactory. Both alloys were prepared in the same manner, using ordinary copper crucible furnaces. Nickel in the form of cubes was placed upon the bottom of the crucible, next to it copper-zinc alloy, and on the latter some copper, and proceeding in the same way till the crucible was filled. On the top of the charge a layer of charcoal was placed. The alloy was run into flat open molds, and the slabs obtained were remelted twice before being used for castings. At each melting about 0.75 per cent. of zinc was added to the melted alloy when the crucible was out of the furnace and ready to be poured through the molds. The molding was done in exactly the same way as regards the sand as in the casting of copper articles, but, as the alloys have a notable shrinkage in setting down, top ends must be placed on the castings, as is done with steel castings. After pouring the metal, the open top ends must be immediately covered with coarsely ground charcoal.

Magnalium is a silver-white alloy, composed of aluminum and magnesium. It is unaffected by air and water. It even withstands oxygen to a great extent, though alkalis attack it. Its specific gravity ranges from 2 to 2.2, and its melting point lies between 600° and 700° C. It "works" remarkably well, and can be rolled into sheets or drawn into wire. Although other alloys may be formed, that used contains 100 parts of aluminum and from 10 to 15 parts of magnesium. According to Mach, the value of the alloy depends on the purity of the metals; and so long as aluminum was made by reduction with sodium it was impossible to obtain a good alloy. The reflective power is very high indeed, and, unlike most speculum compositions, magnalium does not absorb the ultra-violet. These properties, together with its low density and rigidity, make it almost an ideal composition for specula.

Attention is called in the Engineering and Mining Journal to the remarkable malleability and ductility of alloys containing vanadium. An addition of 0.5 per cent. of vanadium to ordinary malleable iron of about 24½ tons tenacity and 19 per cent. elongation gave 39 tons tenacity and 12 per cent. elongation in the forged bar, and 33.7 tons tenacity and 32 per cent. elongation after annealing. A mild steel of 30 tons tenacity and 17 per cent. elongation gave, with 1 per cent. of vana-

dium, 61 tons tenacity and 14 per cent. elongation, and when annealed 45 tons tenacity and 20 per cent. elongation. These alloys, although very soft when annealed, become very hard by tempering. It is represented that a large supply of vanadium would admit of its use in the manufacture of steel furnace plates, forgings for ordnance and naval machinery, projectiles, tools, rolls, etc., and various bronzes.

The causes of hot boxes in railway service and the methods of preventing them have been investigated and reported upon by Mr. Robert Job. Besides the other usual means of studying the subject, the author was greatly aided by microscopic examination of the material of which the defective bearings were made. A wide variation was found in the composition of the bearings. Among the materials employed were the old copper-tin alloy of 7 to 1; copper-zinc bearings running as high as 35 per cent. of zinc; phosphor bronzes in moderate amount; and most numerous of all, the copper-tin-lead compositions, varying considerably in their proportions, but averaging from 10 to 15 per cent. of tin, with from 15 to 5 per cent. of lead and copper. In the majority of cases, however, the mere general composition was found to have caused but a small part of the difficulty. The main causes of friction and heating are described by the author as segregation of the metals, coarse crystalline structure, dross or oxidation products, and an excessive amount of inclosed gas in the metal. Only a very small percentage of the bearings examined seemed to have been discarded solely on account of defect from lack of proper lubrication. Segregation was found to be due in many cases to attempts to alloy the metals in improper proportions. It is also frequently caused by high heating, combined with rapid pouring. It may be prevented to a certain extent, even in a wrongly proportioned alloy, by rapid chilling of the metal immediately after pouring, but such practice is at the expense of the ductility of the metal, and causes increased brittleness with consequent rapid wear in service. The effect of segregation is explained by the fact that instead of an alloy of uniform hardness and heating capacity, a mixture is formed, some portions of which are relatively very hard and others very soft. The difference combined with that occasioned by the varying heating capacity of the different parts localizes friction. In a homogeneous alloy no such conditions exist. The coarsely crystalline structure observed in certain bearings was in some cases found to be due to the composition of the alloy, especially if antimony was present, and in some others was traced to the foundry practice. It was often due to rapid pouring at high temperature and sometimes to an excess of materials originally added as deoxidizing agents. Its effects were increased local friction and material diminution of the ductility and tensile strength of the metal. By the presence of dross or oxidized metal mechanically inclosed hard cutting surfaces were presented to the journal. The presence of occluded gas in excess had the effect of reducing the actual bearing surface of the brass, and thus of materially increasing the pressure. In both of these cases increased friction and consequent heating were the sure result.

In a paper read before the Mining Society of Nova Scotia, Mr. A. C. Ross said that tungsten was generally found associated with tin in wolframite. Its special value as an alloy of steel was on account of its hardening, toughening, and self-tempering qualities. With an alloy of 9 per cent. of tungsten a self-tempered tool steel of great durability is obtained. "Mushet" steel, manufactured

at Sheffield, contains this percentage, and sells for seven times as much as the highest priced ordinary tool steel. Tungsten steel possesses strong magnetic properties, some specimens of it having the high magnetic moment of 62 units, as against 37 units for "diamond" steel, 5 units for "Martin" steel, and 3 units for "Bessemer" steel. The production of the metal to-day in the world does not exceed 1,000 tons. The demand is greatly in excess of the supply, even with the existing high prices. Ore of tungsten had been discovered during the past year in Nova Scotia of unascertained extent, showing on analysis a composition of tungsten oxide 66.32, silica 4.26, manganese 12.02, iron 0.12. In the real wolfram the percentage of iron is much higher, and this tungsten must be called a hibrenite—a mineral supposed to be rarer than wolfram. Tungsten is a difficult metal to mine owing to bunches in the vein, which itself twists about in an extraordinary manner. Besides the present discovery, tungsten deposits are worked in Germany and Bohemia and Texas, and the ore has recently been found in Nevada. Tungsten also occurs in the Cornish tin mines.

In a paper read before the American Institute of Mining Engineers, Mr. E. S. Sperry pointed out that the occurrence of cracks during the rolling of brass is due, at least in some cases, to the presence of impurities in the copper. In a brass composed of 60 per cent. of copper and 40 per cent. of zinc the author found by adding different quantities of antimony that when the amount of that substance reached 0.02 per cent. its presence was indicated by fracture in the rolled metal.

Motor-car builders in France are using largely in the construction of their vehicles an alloy of aluminum and tungsten which they call "partinium." It is much cheaper than aluminum, is nearly as light, and possesses greater resisting qualities. The relative percentages of the constituent metals are varied according to the qualities that are desired in the alloy. Cast partinium has a specific gravity of 2.890. In the rolled form the specific gravity is 3. The elongation varies from 6 to 8 per cent., and the resistance is given as from 32 to 37 kilogrammes per square millimetre.

Experiments on the alloys of gold and copper made by Sir W. C. Roberts-Austen and T. Kirk Rose show that the gold-copper series of alloys present many points of similarity with the silver-copper series, and that the main difference is only one of degree, copper being apparently more soluble in gold in the solid state than in silver.

Processes.—A new combustion process, described by Mr. Paul J. Schlicht before the Franklin Institute, is based upon the fact, which the inventor has discovered, that if a current of air is properly introduced into a chimney or flue through which hot products of combustion are escaping the air current will flow in a direction contrary thereto, and becoming heated in contact therewith will reach the sphere of combustion in a condition highly favorable to the union of its oxygen with all the combustible elements of the fuel. By this system there is no solid and varying resistance to the air supply as in the old process, due to accumulations of ashes and varying thickness of fuel, but there is a constant supply of heated air that flows in contact with the combustion products, and which is regulated by the quantity of combustion products passing through the flue or chimney. The air for combustion may be admitted at the top of the chimney or through a flue leading to the same, the place for admission being determined by the conditions. The author finds that by the use of his process he can, in both domestic and manu-

facturing furnaces, effect a considerable economy of fuel, prevent the production of coal gas (carbonic oxide), burn profitably the smaller sizes of anthracite coals, and effect a great saving through the less frequent necessity of cleaning boiler-furnace fires.

A plant for welding iron, as for trolley rails, by electricity, operated in Buffalo, N. Y., consists of five cars. One of them, termed the sand-blast car, goes ahead and prepares the rail joint for the welding apparatus. Following this come three cars, the first of which is the welder car, next the car containing a rotary transformer, and then the motor and booster car. The coupling of this train is adjusted so that the welder car can move ahead or back several inches without any change of position of the cars following. It can thus change its position along the joint that is being made without disturbing the other two cars. The welding of joints can be made on either old or new track and on paved or unpaved streets, but where old track is welded the pavement has to be removed for a few inches in front of the rail joint. On new track the weld may be made before the pavement is laid or replaced. When a joint is to be welded a bar of steel 1 inch by 3 inches, and 8 inches long, on which are 3 bosses, is placed at each side of the rail web and the jaws of the welding machine are allowed to grip it. A pressure of about 1,400 pounds is applied by means of a hydraulic jack connected to the upper end of the welding machine. As soon as this pressure is applied the electric current is turned on. Instantly the metal between the welder jaws begins to heat. It grows brighter and brighter until a welding temperature is reached, when the current is immediately cut off, while the pressure on the weld is increased to about 35 tons. Artificial means of cooling are at once applied to the weld, in order that the process may be hastened while the pressure is on. The comparatively cold portions of the bars about the boss prevent the more plastic metal from spreading, and the heavy pressure so confines it as to give no opportunity for coarse crystallization while cooling. The center weld is made first, and the ends of the bar are next similarly treated, so that three welds are made at one joint. As the welding bars cool they exert a most powerful influence to bring the ends of the rail together and make a perfectly tight joint. A car with emery wheels operated by a motor follows and dresses any rough parts of the joint.

Among the characteristic disadvantages attending the use of blast-furnace gases as compared with other gases, M. Enrique Disdier, of Bilbao, enumerates variable composition, low ratio of combustible to noncombustible gases, admixture of large quantities of dust, acid, and metallic vapors, and high percentage of moisture. The economy that would ensue upon the direct application of these gases to the production of power by the gas engine was of great importance. The production of a ton of pig iron involved the consumption of a ton of coal, and one horse power per hour might be obtained by the consumption of 4 cubic metres (1,414 cubic feet) of gas. Assuming these data, then it would be found that a blast furnace was able by means of its waste gas to generate nearly 2,100 horse power for every hundred tons of pig iron produced daily after making all due provision for heating and blasting. While the blast furnace has thus far been considered on its own merits as a source of power, its almost indispensable associate, the coke oven, can not be neglected as a gas generator, and therefore a power producer. With its gases the objection of variable composition does not obtain;

further, these gases are rich in combustible constituents, carry little or no dust, are absolutely free from metallic vapors, and their moisture is low. All existing coke ovens may be divided into two main groups—those in which by-products, chiefly tar and ammonia, are recovered, and those which burn their gases without recovery of any of the by-products. For driving gas engines coke-oven gases possess many advantages over the blast-furnace gases. They give 30 per cent. more power with the same size of engine, and the gas mains and distributing pipes can be made very much smaller, so that the plant is rendered much cheaper. Various opinions were expressed in the discussion of this paper in the Iron and Steel Institute concerning the practicability of using the blast-furnace gases, the dust they carry, contrary to the author's assertion, being specified as the most formidable difficulty in the way.

A difference in method between reverberatory and hearth smelting of lead is marked by Capt. C. C. Longridge in that in reverberatory smelting the two operations of roasting and reaction of which the process consists are repeated one after the other, while in hearth smelting the same operations are performed simultaneously. In the reverberatory furnace the lead is reduced from the ore by the interaction of unaltered galena (sulphide) with sulphate and oxide; in the hearth furnace an additional reduction of lead oxide by carbon takes place. The reverberatory process is performed without a blast; in the hearth process the blast is used, and the ore and fuel do not rest upon a solid bed, but on a bath of molten lead; the charge is never fused, but at intervals the blast is stopped, a part of the charge is removed, the poor slag is separated from it, and after cooling and admixture of lime to stiffen it the charge portion is returned to the furnace. Both processes have their advantages and disadvantages. The hearth process has the advantages that the consumption of fuel is less and that the furnace can be started and stopped without much loss, or serious risk to the structure. Its disadvantages are that power is required for the blast, the fumes are more injurious to the workmen, ore of purer quality and higher grade is required, and on account of the blast ore in fine powder can not be treated without previous agglomeration. It is therefore chiefly suitable for intermittent work with small quantities of high-grade nonargentiferous ores. Both products and the treatment of them are the same as in reverberatory smelting. There is, however, an intermediate product consisting of ore, slag, and fuel, termed "brouse," which is washed and remelted with subsequent charges. Some of the advantages of the reverberatory process are that raw ores can be smelted by it without preliminary or independent calcination, raw fuel can be used, the losses of silver and lead by volatilization are small, and the slag losses are strictly moderate. "Unbricked fines" can be smelted by it without excessive loss in flue dust, extraction is easy, and the plant is cheaply erected. Its defects are that as intimate contact of metallic particles is necessary, only rich sulphides or mixtures of sulphides and carbonates containing, say, 68 or 70 per cent. of lead, are suitable for reverberatory smelting. For the same reason the ore must be fairly pure. Blends, iron pyrites, chalcopyrites, calc-spar, barytes, silica, lime, magnesia, etc., must not therefore be present in any considerable proportions. Other defects comprise slowness of operation, heavy fuel consumption, the amount of skilled labor required, and the richness of the slags, which necessitates their retreatment.

The fluid open-hearth steel process in use in the works at Pencoyd, Pa., is described by B. Talbot as combining the rapidity of the Bessemer process with the efficiency of the open-hearth process. As carried on in the open-hearth furnace it consists in working up a large bath (60 tons) and capping off one third. To the remainder are added oxide of iron and 20 tons of molten pig iron. The heat of the bath causes these materials to react with reduction of the oxide and oxidation of the impurities. A great heat is given out and is utilized in increasing the temperature of the bath. When this metal is sufficiently refined the slag is run out and one third of the steel is tapped out, while the other two thirds are retained for mixing with and purifying another 20 tons of pig iron.

In the application of a similar process at Wishaw, as described by J. Riley, the charge is molten metal from the blast furnace, with additions of small quantities of pig iron for refining, but no storage bath like that described in the Pencoyd process is used. The results are satisfactory, and involve a higher yield of steel with increased ore reduction even over that when cold pig iron is used, an increase of about 30 per cent. in the output and a saving in the cost of labor at both blast and open-hearth furnaces.

A smokeless furnace invented by Mr. Pilatt, of Nottingham, and represented as being applicable to all types of boilers or wherever a furnace is required, has as its basis a chilled iron bar, cast hollow longitudinally with lateral openings cast in the web of the bars. These lateral openings or ports enable a regulated and sufficient supply of warm air to be drawn directly from the ash pit and delivered superheated at the back of the bridge. The bridge is contrived so as to deflect the superheated air, which instantly combines with any combustible gas given off by the fuel and not burned into a sheet of flame, and consumes all smoke, at the same time bringing about an increased temperature and a quicker generation of steam. In a "rocking attachment" to this furnace, by a simple movement of a lever the whole grate can be put in motion and clinkers broken up without opening the furnace and suffering an admission of cold air. A forced draught furnace devised by the same inventor, and noiseless, will burn all kinds of fuel, while it is claimed it likewise works without smoke.

A discovery by Mond that metallic nickel forms a volatile compound—nickel-carbonyl—with carbon monoxide has been utilized in a process described by Roberts-Austen for the separation of nickel from cobalt, copper, and other metals with which it is associated in its ores. A similar process is applicable to iron.

In the new process of H. Goldschmidt for welding the clean faces of the metal are brought into contact in the cold, and are then heated by pouring upon the joint the fused product of the reaction of oxide of iron and aluminum contained in a special crucible. The joint is clamped so that the local expansion in heating effects the weld. The clamps may be removed as soon as the weld is complete. Sheet iron or iron gauze may be inserted between the welding surfaces.

A method of superheating the blast described by F. Laret (*Echo des Mines et de la Métallurgie*) consists in interposing between the hot-air stoves and the tuyères an injector of heavy oils which pass into the furnace, increasing the temperature and the yield while greatly facilitating the reduction of the ore. It has been tried with satisfactory results. Only smooth-faced iron is produced by the arrangement, and the carbon and silicon contents are considerably increased.

A process of using dense liquids (saturated solutions of certain salts) for the separation of coal and shale is described by M. Maurice in the *Société de l'Industrie Minérale*. The shale sinks and the coal remains in the top of the solution. A list of salts suitable for the process is given in the paper, of which calcium chloride of 1.411 specific gravity is the lightest and zinc bromide, 2.391 specific gravity, is the heaviest.

An improved process for the production of potassium and sodium by the reduction of those metals from their salts consists in forming electrolytically an alloy of some heavy metal, such as lead, with sodium or potassium, and then distilling the latter.

Miscellaneous.—Mr. W. P. Rix, in a paper read before the Society of Arts, expressed the opinion that leadless glazes would ultimately become available for use in nearly all kinds of pottery. Hitherto little success had attended their application to coarse earthenware owing to opalinity, sluggish fusibility, and inequality of texture. Such glazes required to be dipped as thinly as possible and with far greater uniformity than was necessary in the case of the glazes generally used. Until the leadless glazes were advanced to the commercial stage, the problem which potters were invited to solve was the reduction of the amount of lead absolutely essential in the glazes commonly employed. It should also be remembered that the fritting of lead with silica, borax, and stone could only produce innocuous results when the proportions of earth were such that the whole was chemically combined in a stable form. So far there has been little opportunity to test the leadless glazes, but Mr. Rix represents that they have withstood severe exposure and rough usage.

In a lecture before the Royal Institution on the structure of metals, Prof. J. A. Ewing showed, from microscopical examination, that the structure of polished metal is not homogeneous, but presents numerous granules with irregular boundaries. Each of these granules is a crystal essentially composed of a multitude of exactly similar parts all facing the same way. This crystalline structure accounted for the different luminosities presented by a given sample when viewed with light falling at different angles, because the reflections from the different faces were in different directions. Further evidence of the geometrical character of the structure is to be found in the geometrically regular shapes of the pits formed by minute particles of imprisoned air when cadmium, for example, was cast against a perfectly smooth surface, such as glass.

The present use of blast-furnace slag in the form of sand and as made into bricks and cement was described in a paper on the subject by the Ritter Cecil von Schwarz at the spring meeting of the Iron and Steel Institute. Hitherto slag cement appears to have been a somewhat untrustworthy article; but recently a process for the manufacture of cement from blast-furnace slag has been started in Germany and Belgium, the results of which are regarded as highly satisfactory in the points of strength, volumetrical constancy, and reliability. In the manufacture of this cement the slag is first granulated, and is then reduced to sand. In this condition it is mixed with limestone and slaked lime, and the mixture is reduced to a fine powder. This powder is mixed with water and made into bricks, which are air-dried and afterward burned into clinker in a special furnace. The clinker is stored for about six weeks, and is then ground into a fine powder. The cement thus produced is said to be distinguished

for its exceptional tensile strength and resistance to compression.

Because of lack of coal in the country for smelting Swiss engineers have been obliged to import nearly all the iron they use. This difficulty is likely to be overcome by the application of the electric furnace to smelting iron on a large scale, which has been successfully developed by Herr Müller Landsmann near Meivingen.

The following plan for tempering tools is recommended in the *Revue de Chimie Industriale*: The tools are heated to dull redness, and are then plunged two or three times into a mixture made by dissolving 10 parts by weight of resin in 5 parts of fish oil and stirring in $2\frac{1}{2}$ parts of melted tallow. The tools are then reheated to dull redness and plunged into cold water.

The use of carbide of calcium in metallurgy as a deoxidizing agent is recommended in the *Revue générale des Sciences*. To increase the utilization of this substance a metallic chloride is added, the chlorine of which will combine with the calcium set at liberty in such a manner that the two affinities of the carbon for the oxygen and the calcium for the chlorine will act simultaneously.

Vanadium and platinum have been found in the coals of New South Wales in such proportions as to attract notice. In one analysis the ash yielded 25.1 per cent. of metallic vanadium, 3.6 per cent. of platinum metals, 44 per cent. of combined oxygen, and 27.3 per cent. of sand and earthy matter. In another instance, 1 ton of coal yielded 144 ounces 1 pennyweight and 3 grains of metallic vanadium and 20 ounces 13 pennyweights and 11 grains of platinum metals. Vanadium has also been found in New South Wales in clays, bauxites, micas, igneous rocks, and ironstones. Gold and copper and some other metals have likewise been found in the coal of the country.

METAPHYSICS, AMERICAN, an idealistic and spiritual movement, known under divers names, the most popular of which is "The New Thought." It originated in the United States, and was first heard of forty odd years ago, when the alleged discoveries made through mental or spiritual healing by Phineas Parkhurst Quimby, of Portland, Me., came into notice. Taking root within the last quarter of the century just closed, it has gradually spread until now its disciples may be found in nearly all parts of the habitable globe.

The New Thought is often popularly confounded with Christian Science, with which it has certain salient points of resemblance, while in other fundamental points it is radically different. In the primal belief that all life is one life, that all knowledge is one, that all proceeds from God, its source, and that God is omniscient, omnipotent, and omnipresent; and that, through this oneness of all life with its source, all health, happiness, and prosperity can be recovered and maintained, the two movements are at one and identical. The chief points of difference are these: Christian Science affirms that the whole material world is but an illusion of "mortal mind," and that by denial of this illusion—matter—one realizes more fully one's spiritual origin and power. The disciples of Modern Metaphysics, or New Thought, on the other hand, believe the whole visible universe to be a reality, an expression of God's word made manifest in palpable form; even as they also look upon the body of man as representing more or less clearly his spiritual condition or mental life.

Christian Science, in order to assert more positively the healing power inherent in spirit, begins by denying the reality of sin, sickness, and death, regarding them as part of the illusions of "mortal mind." The New Thought admits sin, sickness,

and death to have an existence, but only such existence as can be overcome by the assertive power of spirit; which when quickened into full perception of its birthright, its acknowledged sonship or oneness with God, can, by putting away the mental picture of disease, and seeing only health and wholeness, proceeding from immanent God, remove the conditions that called disease into being. This, it declares, comes by concentration of spirit on the things desired, and is in perfect accord with the working currents of spirit law and creative power.

Christian Science builds all upon the Bible, the works wrought by Christ, and the alleged special revelation and discovery by its founder. It bids its believers confine themselves to the Bible and the text-book *Science and Health*, with *Key to the Scriptures*, prepared by its founder, on the ground that other literature, being the product of "mortal mind," might distract from spiritual concentration. The New Thought lets its disciples take all knowledge for their province and accept light wheresoever they find it, on the plea that God gave glimpses of truth in divers ways, at many times, and to all peoples—even to those to whom St. Paul said, "The unknown God whom ye ignorantly worship, him declare I unto you," and that, while Christ is the greatest light yet descended on the world, God also sent other prophets to other peoples, and taught them great truths.

Again, Christian Science is a thoroughly organized body, founding churches and consolidating strength under one visible head. The New Thought shows no desire to found a church at all. Its leading exponents are wont to declare that there are churches enough already, and that the best work of their movement lies in supplementing these—proving the workings of a vitalized faith that takes the great Master Teacher literally at his word as to both example and precept. They declare that Christ put healing, in all its spiritual significance, before preaching, and insisted on his disciples performing the "works"! They waive alike creed and theological propaganda, asserting that man must live from the center of life outward; that the temple of God is in the human soul, and all worship must proceed from within, even as every creative work emanating from man must take vision and form in his mind before taking outward shape at his hand; that man must seek a knowledge of the laws that control and regulate life everywhere, and through conformity with these laws only can he come into possession of his own full powers, control matter, and build the kingdom of Heaven here on earth as truly as in any other sphere of existence.

In short, this new metaphysical movement is not a doctrinal religion, but rather a very eclectic working philosophy of daily life. Its exponents affirm, over and over, that it values whatever it can reduce to practice and apply to man's visible well-being; that its work is with the here and now more than with the hereafter—which will follow in natural sequence from the life here. To The New Thought believer, sickness, sin, warped mentality, selfishness, pride, malice, sensuality, etc., are but lack of spiritual development. There are no good and bad, no high and low, in the scale of humanity; there are the developed (according to degree) and the undeveloped, and the latter have latent within them all the possibilities of the former, evolution being essentially a matter of spirit, to be realized some time, somewhere. There is no dominant evil power in the universe, the conditions called evil being only a negation of good. God. Fear is the devil that has played so large a part in the fortunes of man, and the only devil there is—

to be laid forever whenever man enters into a knowledge of his own powers, his birthright. He discovers these powers, not by cringing and begging for them, but by demanding them in accordance with Divine law. Made in God's likeness, man is godlike in possibilities. Ignorance is the only original sin—the sin of low desires. All sin is ignorance of law. Thought is a living thing; it is all the life there is. Every existing thing is a thought of God, and thought makes man what he is. In control of his own mind, he can control the things around him. Without this spirit force he may succumb to circumstance and become the slave of passing effects; he loses vitality, meets with sickness and death. The truly poised mind can not be overcome by anything on the outside. Nothing can harm man but himself. Spirit force, the influx from God, builds up, expands, fills all space, drives out negations, removes what would appear mountains to the unawakened mind; hence those feats which the world has called miracle. There is no miracle; the things so called are but the harmony of higher law taking visible expression. Thought, life, intelligence, can become one with God, and God is all in all!

This is but a brief summary of the tenets of Modern Metaphysics, whose vocabulary is as varied as is the quality and culture of the disciples who express it, and who come from every walk of life. Latterly, however, the growth of the movement is notably larger among the cultured classes; and, according to information recently gathered from leading workers in the cult, it is meeting with friendly favor from several of the "advanced" clergy within the evangelical churches, while, oddly enough, the clergy of the liberal churches still regard it in the main with coldness or aversion. Moreover, it is affirmed that the interest of the clergy is due to the reports brought to them by parishioners and members who proclaim the gospel of cure from various ailments and distempers.

Owing to indifference to organization or anything like a cohesive policy, it is not easy for the leaders of the movement to count their followers. Interfering in no wise with the established order of things, the disciples of The New Thought are to be found mainly within the churches, and a noticeably large number are within the Episcopal Church. According to recent information and estimates, the movement, all told, in this country and others, would count somewhat more than a million interested followers and more or less firm believers, while the people who do not confess belief, and yet seek aid for their ills and misfortunes, can not, of course, be counted.

Although this doctrine was quietly working and gaining ground as early as 1860, the first visible attempt at anything approaching organization took place only about fifteen years ago, when the Metaphysical Club was founded in Boston. This club has several hundred members, and is constantly increasing in outside membership. It is also the headquarters to which people at a distance are wont to send for information. Lately an International Metaphysical League has been formed, the first meeting of which was held in October, 1899, in Boston, and lasted several days. In October, 1900, this same league held its second meeting in Madison Square Garden Concert Hall, New York, where crowded houses were addressed for nearly a week. Many prominent speakers took part, among them the Rev. Heber Newton, D. D., of New York; Prof. George D. Herron, of Grinnell, Iowa; Dr. Lewis G. Jones, of Cambridge, Mass.; John Brooks Leavitt, LL. D., of New York; Prof. J. M. Tyler, of Amherst; Swami Ahedananda, of India—who traced a kinship between much in mod-

ern metaphysics and the ancient Vedanta philosophy of India; also other medical men and clergy. The league will meet in 1901 in Chicago. The movement is still strongest in New England, especially in Massachusetts, while Rhode Island and Maine seem to stand next in numbers and interest. Next to Boston, its strongest hold is Chicago, New York comes third, after which it seems to be fairly disseminated throughout the Middle and Western States and cities, and is quite active in Canada. In England it is said to be growing surprisingly, especially among the upper class and in the Church. Some among the English clergy have written for information concerning its origin and history from this side of the Atlantic. Not long ago the foremost metaphysical magazine of New York published in full a sermon entitled *God is Love*, delivered by Canon Basil Wilberforce in Westminster Abbey, and listened to by the editor, who looked upon it as so strong an exposition of much of the best in The New Thought that he obtained the noted divine's permission to publish it.

The growth of the movement is noticeable in Switzerland and France, and more especially in Australia. In all newer settlements to which people of English speech betake themselves, there appears an active desire to found clubs for its dissemination. Letters come to the centers at Boston and New York, especially, from New Zealand, New South Wales, and settlements in Africa and elsewhere, asking advice concerning this philosophy of living. Among people of leisure in the large cities in America coteries are found, where interested persons meet and discuss New Thought tenets and relate experiences among friends and acquaintances. Several such coteries exist in New York, and there are at least three places where the public in general are welcomed to listen to expositions of this philosophy. Similar ones flourish in other cities. The spread of the cult is doubtless due in a measure to its literature, which is plentiful, ever increasing, and in great variety. No embargo is laid on thought, and a vast amount of vagary sees the light in print. But the cult can claim also some fine and subtle writers. Two magazines devoted to its interests have long flourished in New York.

The question has arisen from time to time in regard to the real origin of this whole modern metaphysical movement. Doubtless much of its loftier thought might trace its inspiration to Emerson's utterances concerning the Immanent God in all things and the glory of living according to one's visions; but when it comes to the practical workings that interest humanity in general—the healing of physical ills and the restoration of disordered mentality—there is room for no dispute that the obscure and almost unknown Quimby was first in the field. Phineas Parkhurst Quimby was born in Lebanon, N. H., Feb. 16, 1802. He was the son of a blacksmith, and was one of a family of seven. When he was two years old his parents removed to Belfast, Me. His opportunities for education were scanty. He is said to have acquired a knowledge of the rudimentary branches and supplemented these with as much reading as he could obtain. His son, George A. Quimby (still living at Belfast), furnished a sketch of his father's life to the *New England Magazine* in 1888. Some time later Mrs. Annetta Gertrude Dresser, one of Mr. Quimby's earliest patients in Portland (to which place he removed in 1859, as his fame grew), compiled a little volume on his life and philosophy. A mass of manuscript is also in the possession of his son. This was penned by the Misses Ware, of Portland, Me., daughters of the late Judge Ashur

Ware, of the Supreme Court, who were also patients of Mr. Quimby's, who is said to have restored them both to health, and who wrote down his sayings as they fell from his lips. These, together with the memory of a few persons still living, save from oblivion the founder of a now widely known cult—a man who never dreamed of fame and died without fortune. His son's account shows him to have been a pioneer in thought and experiment from his earliest years, even inventing many mechanical devices for which he took out patents. He was also a semi-invalid from early youth, whom the doctors had pronounced a victim of an incurable malady of the lungs.

In 1833 a French gentleman, M. Charles Poyan, came to this country, where he had relatives, and brought with him the first practical information known here of mesmerism, through which agency he claimed to have been cured of a chronic disease. Mr. Quimby heard his lectures, and at once seized upon the idea; first with the desire to better his own health, and second, to discover all that might be in it. He met with a youth named Lucius Burkmarr, who proved a wonderful subject, and with him he worked and gave experiments that astonished those who saw them, but did not convince Mr. Quimby himself. He finally came to the conclusion that there was nothing in mesmerism save what was reflected through the mind of the subject from the minds of those about him. Then he gave it up. One day, while he was out for a drive with a horse and buggy loaned by a friend, the exertion made him so weak he could no longer hold the reins, and the horse had it all his own way. The animal took fright and was in danger of ending both himself and the rider. In this emergency, Mr. Quimby grasped the reins, when instantly more strength than he had known for years came back to him, and he was able to control the animal and bring him to terms, and the strength lasted during the whole period of his need for it.

This incident made the turning point in his career. It set him to investigating the nature of that preternatural strength. From this proceeded step by step his subsequent discoveries concerning the latent force within others as well as himself, its connection with universal force, and the source of it all. He experimented, and by degrees was successful. The fame of his strange mode of treatment and its strange results grew till it obliged him to leave Belfast and settle in Portland. During the six or seven years that he practiced in that city people flocked to him from various parts of the country, but especially from New England. It was in the early sixties that the Misses Ware took to writing down his philosophy, which he himself called *The Science of Health*. Among others who came to him for treatment in 1862, persons still living recall Mrs. Eddy (then Mrs. Patterson), whom, it is said, he cured of a supposed to be hopeless trouble. Dr. Quimby died Jan. 16, 1866, aged sixty-four years. In that same year Mrs. Eddy says she discovered Christian Science. Mr. Quimby's son says: "The last five years of his life were exceptionally hard. He was overcrowded with patients and greatly overworked, and could not find an opportunity for relaxation. At last Nature could no longer bear up under the strain. Completely tired out, he took to his bed, from which he never rose again. . . . Mr. Quimby's idea of happiness," continues his son, "was to benefit mankind, especially the sick and suffering, and to that end he labored and gave his life. His patients found in him not only a doctor, but a sympathetic friend, and he took the same interest in treating a charity patient that he did a wealthy one. Until the writer went with him as secretary, he kept no

accounts and made no charges. He left the keeping of books entirely to his patients, and although he pretended to have a regular price for visits and attendance, he took at settlement whatever the patient chose to pay him."

Mr. Quimby, according to concurrent testimony, died poor. It was his wish that his son should succeed him in perpetuating the gospel he discovered and proclaimed; but his son preferred other lines of work than dealing with the sick. One of Mr. Quimby's first patients, the late Julius A. Dresser, of Portland, took up the art of healing for a time. His son, Horatio W. Dresser, a graduate of Harvard, is now one of the foremost of metaphysical writers. Dr. Evans, author of *Primitive Mind Cure* and *Esoteric Christianity*, was one of the next to make themselves heard of in this line of thought. His turn of mind appears to have been more speculative than logical. In later years Henry Wood, of Boston, gained world-wide fame. His books have been translated into several languages, and his *Ideal Suggestion through Mental Photography* is said to have run through several editions even in the Chinese tongue. Writers of lesser note and varying degrees of merit are numerous. See *CHRISTIAN SCIENCE*, in this volume.

Students of the "Transcendental" movement of the New England of sixty years ago may recall that one of the popular names for it was "The Newness"; they will also recall the remarkable group of men and women who inspired it. Among these were George Bancroft, F. H. Hedge, Theodore, Alcott, Garrison, Theodore Parker, Wendel Phillips before he gave all his attention to slavery, the Frothinghams, Ripleys, Danas, and, in short, the whole band that afterward tried the Brook Farm experiment. Among the leading women of the movement were Margaret Fuller, Mrs. Bancroft, Lydia Maria Child, Mrs. Emerson, Mrs. Nathaniel Hawthorne, Mrs. Phillips, Mrs. Horace Mann, Elizabeth Peabody, Miss Anna Shaw, Miss Caroline Sturgis, Miss Quincy, Mrs. Theodore Parker, Miss Maria White (afterward Mrs. James Russell Lowell), and Miss Lee. Emerson, of course, was chief of all, but as a looker-on rather than an active participant; he always regarded the vagaries of the band with an indulgent curiosity.

The famous Dial, established in 1840, had for its first editor Margaret Fuller, and later Emerson himself. It had but a short life; its thought shot over the heads of its day, and it died for want of sustenance. Copies of it still exist in libraries, and whoever cares to consult it may easily perceive that its aims, though spiritual, are totally unlike the tenets of New Thought as outlined in this article. The older movement proclaimed with equal ardor the spiritual uplifting of the race, but the way to this was sought through physical conditions. All sorts of theories prevailed for the uplifting of soul through the purification of bodily environment and habit. It was really a sublimation of time-approved doctrines and experimental theories regarding food, clothing, social customs, fashions, etc. The tenor of New Thought is the reverse of all this. Every change in the expression of individual life, it declares, must be wrought through spirit. The body itself can express nothing, save only as spirit informs it. Bodily vicissitudes even can not affect the spirit that does not consent to them. It preaches no crusade against custom, or fashion, or any of the so-called good things of life. Every kind of food is wholesome, because it is of God's giving, and none can disagree when spirit controls appetite. Dyspepsia even is a bugaboo only to the one ignorant of spirit law and his own inherent power

over ills. The full-fledged believer in New Thought proclaims at all times and seasons that the best clothing and best environment that the world has to give is no more than the birthright of every creature coming into it as an expression of "God's Thought." All the good things of life are conducive to spiritual joyousness, and joy, harmony, and love are the creative factors in the universe. Vibrate harmony, and it draws you within the vibratory forces of Nature, which works with you to the possession of all you need. The older spiritual movement had not rid itself of the notion of the efficacy of self-inflictions; it was in its tendency combative, as witness the vehemence of the antislavery crusade led by its adherents. The new movement preaches non-resistance. Create harmony out of discord, and thus gain control; conquer all things through the law of spirit.

This pervaded all Emerson's philosophy, and its practical ethics were attempted even by Alcott in his school-teaching; but its objective results were somewhat crude, and amid the hard ethics of his day resulted only in ridicule from his neighbors. Indeed, the teachings of Emerson himself were far from being understood when he uttered them by most of his nearest acquaintances; their comments on them sound very queer to-day.

Unlike as they are, however, in expression and method, some of the spiritual light of the older period has filtered down, and may be traced in some of the utterances and writings of the present-day movement. It is the boast of its exponents that no one man, or period, or philosophy, inspires it to the exclusion of others. It is emphatically inclusive. But the core of its working value to-day, that which makes it talked about and antagonized, is the widely accepted belief in its power to heal physical and mental ills and moral deformities. On this point no fair-minded adherent denies the priority of practical discovery and demonstration to P. P. Quimby. Whether Mr. Quimby was indebted for inspiration to leaders of the older movement, which was at its height in his young manhood, it is impossible to say. Nothing in his recorded utterances gives evidence that he was. There is in them ample evidence that he was a keen and critical investigator of all that passed under his ken, and that he had no love for the theology of his day. He plainly blamed the religion of the time for a large part of the mental and physical disorders that came to him for cure. At the same time, it is quite evident that he was a deeply religious man and a devoted student of the Bible. The Newness died out for want of cohesion or a practical point around which to rally. Through Quimby New Thought has found a key which it fits to the most vital needs of humanity. Its value is not a matter for comment here, but this latter quarter of a century movement, under one name or another, counts, all told, considerably more than 2,000,000 followers.

See Henry Wood: *Studies in the Thought World; God's Image in Man; The Political Economy of Natural Law*; and two stories, *Victor Serenus*, a tale of the Pauline era, and *Edward Burton*, a story of modern life. Dresser: *The Power of Silence, The Perfect Whole, and In Search of a Soul*. E. D. Babbitt: *The Principles of Light and Color, Human Culture and Cure, and Health and Power*. Ernest Loomis: *Your Practical Forces, and How to use Them; Force Massing and Methods; Practical Occultism; and Methods of Self-help*. Among the contributors to the two leading magazines—*Mind* and the *Metaphysical Magazine*—Dr. Alexander Wilder fills a prominent niche. His writing is both scholarly and

searching. Prominent, also, is a younger writer, Stanton Kirkham Davis, a lawyer, author of *Where Dwells the Soul Serene* and other works. A *Better World of Philosophy*, by J. Howard Moore, is also much approved. There are popular writers by hundreds in this line, and there is no doubt many of them draw inspiration from a man who would not be likely to rank himself with this school at all, namely, the famous Dr. Franz Hartmann, of Germany, one of the most noted occultists of any age, author of many noted works, among which may be mentioned *Life and Works of Paracelsus and Magic, White and Black*. The latter is one of the most marvelous books ever written, and is now rare.

METHODISTS. I. Methodist Episcopal Church.—The 150 annual organizations of this Church embraced in the plan of episcopal visitation for 1900-'01 comprise 124 annual conferences, 12 mission conferences, and 14 missions in the United States and foreign countries. The statistical returns of these conferences, as published in the *Methodist Yearbook* for 1901, give aggregates of 17,752 ministers in full connection and on trial (including supernumeraries and superannuates), 14,232 local preachers, 2,907,877 lay members (including full members and probationers), 32,119 Sunday schools, with 350,271 officers and teachers and 2,700,543 pupils; 27,382 churches, having a probable value of \$126,273,871; and 11,202 parsonages, valued at \$19,486,073. As the *Yearbook* went to press before the reports of some of the conferences, which were held late in the fall of 1900, had been made up, it was necessary to insert for these conferences the figures given in their journals for 1899; hence the numbers here given will not exactly agree with those which will appear in the official minutes of the annual conferences for 1900. They nevertheless accurately represent the life of the Church for a twelvemonth.

The educational institutions include 25 theological schools, with 100 professors and teachers and 1,230 students; 56 colleges and universities, with 1,821 professors and teachers and 28,619 students; 60 classical seminaries, with 496 professors and teachers and 9,320 students; 8 institutions exclusively for women, with 157 professors and teachers and 1,187 students; 99 foreign mission schools, with 533 professors and teachers and 7,454 students; and 4 missionary institutes and Bible training schools, with 87 professors and teachers and 453 students; making in all (allowing for 24 institutions, with their teachers and students, duplicated), 228 schools, with 3,040 professors and teachers, 46,545 students, grounds and buildings valued at \$16,843,295, productive endowments aggregating in value \$10,573,306, and a total value of property and endowments, productive and prospective, exclusive of debt, of \$28,909,471.

The list of official periodicals of the Church includes 2 English magazines and 1 German magazine, 11 English and 1 German weekly periodicals, and 14 Sunday-school periodicals and lesson helps in English, German, and Swedish. Besides these, a large number of independent and local unofficial periodicals are published, representing many aspects of the life, thought, and interests of the people of the Church.

The institution of deaconesses in the Methodist Episcopal Church was begun under private initiative in 1887. It was recognized by the General Conference of 1888. This General Conference also instituted an order of deaconesses in India, to whom authority was given to administer the sacraments to such women only in that country as could not be reached otherwise. Deaconesses have been the subject of further legislation by

subsequent general conferences. The Methodist Episcopal Deaconess Society was organized in 1895, and has been incorporated. It was intended to form a bond of union between deaconess workers in various fields of labor, and is competent to hold property for the care of disabled deaconesses, and to hold property temporarily till it can be placed under the care of a local board. Deaconess institutions have multiplied rapidly, and are numerous in the United States, at Methodist centers in Europe, and at foreign mission stations.

Fifteen children's and orphans' homes and schools are sustained by various benevolent societies and special organizations within the Church. Among numerous other institutions under the control of boards or members of this Church are 8 homes for the aged and 19 hospitals.

Chapters of the Epworth League are established in all countries where the Methodist Episcopal Church exists. The enrollment for 1900 represents 20,420 regular chapters and 7,300 junior chapters, with a total of 1,900,000 members. The league is under the direction of a board of control composed of ministers and laymen, one half of whom are appointed by the bishops and one half elected by the General Conference districts.

The total receipts of the Sunday School Union for the year ending Nov. 30, 1899, were \$23,381, and the disbursements were \$19,300. It made return, besides the schools in the United States, of 4,204 schools in foreign lands, with 10,357 officers and teachers and 189,369 scholars, showing an increase for the year of 364 schools (foreign), 700 officers and teachers, and 15,559 scholars.

The receipts of the Tract Society for the year ending Nov. 30, 1899, were \$18,747, and its disbursements \$24,723. During 1899 grants of books and tracts were made to China, India, Africa, Japan, Korea, Norway, Finland, Denmark, Germany, Switzerland, Italy, Bulgaria, Mexico, Chili, and the Argentine Republic. Tracts were also distributed in every part of the United States to pastors in their regular work, to immigrants, to inmates of hospitals, prisons, and asylums, and to sailors and soldiers, the aggregate of distribution in the United States being 9,377,000 pages. Besides these, 1,848,000 copies—being a weekly average of 35,338 copies—of the periodical Good Tidings were circulated in the South in connection with the work of the Sunday School Union.

The annual meeting of the Board of Education was held in New York city, Dec. 5. The treasurer reported that the income from Children's Day collections, interest on invested funds, returned loans, gifts, and legacies had been \$129,370. Eighteen hundred and thirty students, representing 20 different nationalities, had been aided with \$81,794. Several large gifts and legacies had been received. The board ordered that hereafter persons contributing to its work \$1,000 or more should have a fund created to bear either the name of the donor or some name suggested by him.

Church Extension.—The General Committee on Church Extension met in Brooklyn, N. Y., Nov. 8. The receipts for the year from all sources had been \$386,410, or \$48,441 more than in 1899. The sum of \$229,118 had been available for use in donations, etc., on account of the general fund, and \$314,576 on account of the Loan fund. Loans to the amount of \$129,290 had been returned. Additional care had been taken in the collection of loans. Mention was made in the report of the losses suffered in many parts of the country from storms and floods, as likely to result in calls for aid in rebuilding or restoring church property. The receipts from the beginning of the

society, in 1865, to Oct. 31, 1900, had been \$6,945,969, and during the same period 11,677 churches had been aided. A call had been issued in 1899 for \$1,000,000 in thank offerings for church extension, for the erection of 1,000 churches each on the Frontier and Mountain fund plans, for securing additions to the Loan fund, and for the payment of debts on churches that had been aided by the board; toward this sum \$298,161 had been received. Appropriations of \$335,547 were made for the ensuing year.

Freedmen's Aid and Southern Education.—The annual meeting of the Freedmen's Aid and Southern Education Society was held in Newark, N. J., Nov. 12 and 13. The reports represented that interest on the part of the Church in the cause for which the society is concerned had considerably increased. The receipts for the year had been \$355,805 (of which \$11,425 were entered "Treasury overdrawn"), and showed a net increase of \$4,124 over those of the previous year. The expenditures had been \$355,805, of which \$171,773 were for schools among colored people and \$47,815 for schools among whites. The amount of indebtedness was \$154,891, showing a reduction of \$23,183 during the year. It was decided at the meeting to ask the conferences to give \$100,000 additional of contributions to be applied to the payment of this debt, and the total amount asked from the conferences for the ensuing year was \$251,950. Secretaries and pastors were advised, when presenting the work of the society to the people, to lay special stress on its industrial aspects, and to appeal for special gifts for the larger development and better support of the industrial plants. An appropriation of \$12,500 for industrial education was recommended, to be distributed among different schools. The following resolution was adopted: "1. That we deprecate the action taken by some of the States of the Union, which, by constitutional provision, is designed to disfranchise a class of voters whose right to all the privileges of citizenship is secured by the amendments to the Constitution of the United States, and that we protest, in the name of justice and of that equality before the law which has been the boast of the American people, against such tests and provisions for voters as can not operate equally with all classes without regard to color, race, or previous conditions. 2. That while we favor the use of an educational test which shall not discriminate against any class on other grounds, we earnestly protest against what is known as the 'grandfather clause,' as partial, unjust, un-American, undemocratic, and oppressive. 3. That the time is here when representation in Congress should be based upon the number of voters in the States, and not on the population as a whole, or some other constitutional provision is made that will give to each State an equivalent representation in the House of Representatives."

Women's Societies.—The Woman's Home Missionary Society met in its annual convention at Chicago, Ill., Oct. 17. The treasurer reported an advance of more than \$50,000 in receipts. Of the \$200,000 pledged for the Twentieth Century Thank-offering fund, \$100,000 had been secured. A bequest of \$25,000 and gifts of \$5,000 and \$10,000 were mentioned. Several of the society's homes had been enlarged during the year; the Bohemian industrial building, at Baltimore, Md., had been completed; land had been purchased in Washington, D. C., and paid for, for Rust Hall; and new work had been opened in the Hawaiian Islands and Porto Rico.

The reports made to the General Executive Committee of the Woman's Foreign Missionary

Society at its annual meeting in Worcester, Mass., Oct. 24, showed an increase of more than \$54,000 in receipts, the total amount raised during the year having been \$414,531. About \$70,000 had been contributed to the Thank-offering fund, which now amounted to \$118,000. Thirty missionaries had been sent out during the year, and 13 new missionaries were accepted. Appropriations of \$373,969 were made for the ensuing year.

Missionary Society.—The annual meeting of the General Missionary Committee was held in New York city, Nov. 14 to 20. The treasurer's report showed that the total receipts of the Missionary Society from Nov. 1, 1899, to Oct. 31, 1900, had been \$1,223,904, and the disbursements \$1,262,682; and that the present indebtedness was \$49,813. In addition to the regular income, special gifts of \$76,803 had been received. Appropriations of \$625,324 were made for the foreign missions in Germany, Switzerland, Norway, Sweden, Denmark, Finland and St. Petersburg, Bulgaria, Italy, Eastern and Western South America, Mexico, Africa, China, Japan, Korea, India, and Malaysia; \$472,791 for domestic missions, \$179,616 of which were to be applied to non-English-speaking populations in the United States; \$120,160 for the Contingent fund and miscellaneous objects, and \$23,904 for the debt; making a total amount of appropriations of \$1,242,179. In addition to this amount, \$98,500 for special purposes were authorized to be appropriated conditionally. Recommendations were made by the committee in reference to the collection for the Twentieth Century Thank Offering to be taken in connection with the regular collections for missions, to the effect that "whatever is raised in addition to the amount of the collections of the previous year shall be the Twentieth Century Thank Offering for missions, and a sum equal to the collections of the previous year plus 5 per cent. of that sum shall be added to legacies and lapsed annuities and appropriated in 1901, and the remainder of the collections not otherwise designated shall be appropriated to the missions in foreign countries."

Episcopal Address.—The address of the bishops to the General Conference began with a comparative review of the condition of the Church at the time of the meeting of the first delegated General Conference in 1800 and now, showing, among other things, that during the century the various Methodist churches in the United States, all having been derived from the one church of 1800, have increased from 61,000 communicants to nearly 6,000,000. It then described the proceedings had in behalf of the Twentieth Century fund and the present condition of the enterprise; reported the transactions of the bishops and of the Episcopal Board and the work in the mission fields, and reviewed the present state of the Church at considerable length, under the several heads of numerical growth, benevolence, doctrinal fidelity, and spiritual life; attempting to account for some phenomena of a less encouraging character which had been recently developed. Of matters of church polity, the results of the vote of the Church on the proposition for the equal representation of the clergy and laity in the General Conference was mentioned as exhibiting a remarkable approach to unanimity. The working for twelve years of the change of the limit of pastoral service from three to five years was spoken of as not answering the expectations that had been entertained from it, and the bishops expressed the opinion that "if the General Conference shall not approve a return to the three years' limit of annual appointments, with well-defined and carefully guarded provisions for necessary exceptions to this limit, then an

entire removal of the time limit of annual appointments would be of advantage to the work." On the subject of the Church and public morals, the address maintained that the Church could not permit the least abatement of its hostility against the liquor traffic or relax its attitude toward divorce. With regard to amusements, the restrictions prescribed in an earnest age like the ages of Wesley and the Puritans could not be enforced in their full measure under modern conditions of society. "The attempt to enforce absolute abstinence from recreative amusements reacts toward unrestrained indulgence. A discrimination between the admissible and the inadmissible is therefore imperative." Wesley's principle that the taking of such amusements as can not be taken in the name of the Lord Jesus should be often reiterated and emphasized in this time of excessive and questionable amusements. "Without simplicity, moderation, and purity in his pleasure, the Christian can not resist the forces that create an age of triflers and sensualists. So great is this danger that we suggest that it would be profitable to place among the special advice in the Discipline a brief but cogent statement of the perils which attach to many amusements, of the evils inseparable from others, and of the principles by which the Christian should regulate his choice among and his use of them." As regards Christian unity, "the Methodist Church has always held the simple and broad doctrine that all who acknowledge Jesus Christ as Lord and Saviour constitute the one body, of which he is the head," and that their several churches, however diverse in certain respects, "are the several parts of the world-wide and indestructible society which is his visible witness on earth." Yet the practical relations of the several churches lack much of full correspondence to this ideal. In view of this fact, while Methodists must hold the truth as God gives them to see it and do their own work in their own way, they must even more than heretofore give diligence "to keep the unity of the spirit in the bond of peace," must grant to other churches the ample tolerance they claim for themselves, must honor them "as branches of the True Vine, as temples of the Holy Ghost," must seek opportunities for the expression of Christian fraternity and for co-operation, and must study, "with earnest and unselfish desire to solve, the difficult problem of many churches in scanty fields." For political dangers and evils, "a strenuous and militant political righteousness, inspired and directed by Christian ideas, is the only remedy." And the Church "must insist that a wise, persistent, and heroic earthly citizenship has now become a supreme test of noble character."

General Conference.—The twenty-third delegated General Conference met in Chicago, Ill., May 2. A question arose at the beginning concerning the number of lay members to be admitted. The plan of lay delegation in force since 1872 provided for the admission of not more than two from each annual conference. The General Conference of 1896 had submitted to the conferences for their action the draft of a rule making the number of lay delegates from each annual conference equal to the number of ministers it was entitled to send, so that the General Conference should be composed equally of ministerial and lay delegates. This measure had failed to receive the three fourths vote in the annual conferences required by the constitution of the Church, and had therefore been lost. Thereupon the Rock River Conference had made a proposition, which was submitted to the annual conferences, for so altering the article of the Discipline concerning lay

delegation that it should read, "The lay delegates shall consist of one layman for each annual conference, except such conferences as may have more than one ministerial delegate, which conferences shall each be entitled to as many lay delegates as ministerial delegates"; and so modifying other references to the subject in the Discipline that their reading should be consistent with the amendment proposed. This measure had been carried in the annual conferences, the votes of the ministers members thereof having been 9,270 in its favor and 1,524 against it. In anticipation of the adoption of the amended rule, provisional lay delegates had been chosen in all the annual conferences in addition to the regular ones, so that they might be present and ready to take their places as soon as the new rule should go into effect. The action of the annual conferences in favor of the proposed change in the rule governing the number of lay delegates was concurred in by a unanimous vote. Among the provisional delegates present to be seated was a woman—Mrs. M. Y. McMahan, of Illinois. In order that the actual admission of the other "provisional" lay delegates might not be complicated with the question of the eligibility of women to seats in the General Conference, Mrs. McMahan declined to present her credentials. The secretary of the General Conference was then directed to call the roll of provisional delegates, for the immediate seating of all against whom no objection should be offered. This was done, and the provisional delegates were seated as members of the General Conference.

The commission appointed by direction of the previous General Conference (1896) to prepare and report, "first, a draft which shall set forth in well-defined terms and in logically arranged articles the existing organic law of the Methodist Episcopal Church; and, secondly, any modifications of said organic law which the committee may recommend for adoption by the concurrent action of the General Conference and the members of the annual conference," presented its report, and the consideration of the paper constituted the principal part of the business of the session. This report, in its first part, defined the existing organic law of the Church as being embodied in and limited to the articles of religion, the general rules, and the sections on the General Conference in the Discipline of 1808, enacted by the General Conference of that year, together with such modifications thereof as had been adopted since that time. The second part of the report, embodying recommendations for modifications of the organic law, was taken up, considered section by section, and adopted with such amendments as were accepted, for submission to the annual conferences. With reference to the eligibility of women to be members of the General Conference, an amendment was proposed for approval by the annual conferences, so changing the articles of the Discipline prescribing the qualifications of lay delegates as to substitute the term "lay members" for "laymen" wherever that word occurs. An amendment was proposed to the rule respecting the annual appointments of ministers to their several charges, by striking out the clause limiting the number of years during which a minister may be sent to the same place to five, so that the passage shall read, "He [the bishop] shall appoint the preachers to the several pastoral charges annually." While expressing its judgment that liberal provision should be made by the Book Committee for the support of the bishops and General Conference officers, the Conference resolved that "no bishop or General Conference officer shall receive anything above actual expenses for his services in

the dedication and reopening of churches, attending commencements of our educational institutions, and such other like services as he may render the Church." All the present active bishops were declared effective, and two additional bishops were chosen, namely, the Rev. David H. Moore, D. D., and the Rev. John H. Hamilton, D. D.; also two missionary bishops, for southern Asia, to be co-ordinate in authority, viz., the Rev. Edwin W. Parker, D. D., and the Rev. Frank W. Warne, D. D., already missionaries in India. In addition to the episcopal residences in the United States, additional episcopal residences were constituted at Zurich, Switzerland, and Shanghai, China, to the former of which Bishop John H. Vincent, and to the latter Bishop David H. Moore, were assigned for four years each. It was decided that there be but one general secretary for each of the organized benevolences of the Church, who shall be the executive officer, except in the case of the Freedmen's Aid Society, to which two secretaries were given; with at least one assistant secretary for societies requiring more than one secretary, to be elected by the General Conference. Several of the official newspapers having proved to be not self-supporting, the number of journals was reduced by consolidation or by requiring that arrangements be made for their publication without expense to the Church. The offices of general secretary of the Epworth League and editor of the Epworth Herald were united. The committee to whom a number of memorials on the subject were referred recommended the removal in the disciplinary rule regarding worldly amusements of the words condemning "dancing, playing of games of chance, attending theaters, horse races, circuses, dancing parties, or patronizing dancing schools" from the paragraph relating to conduct liable to reproof or punishment, and their insertion in the paragraph designated as "special advices." The recommendation was not sustained by the Conference, and the advice of the minority report that no action be taken on the subject at this time was adopted. A petition to Congress was adopted, asking the removal of the tax on legacies given for charitable, educational, and religious purposes, because it was, in the judgment of the General Conference, contrary to public policy and to the aim and spirit of our institutions, and practically a direct tax on the institutions that do most to aid government and benefit the people. A resolution was passed expressing regret that after the passage of a law prohibiting the sale of intoxicating liquors at army posts and in forts, camps, reservations used for military purposes, and national soldiers' homes, the plain intent of the enactment had been, "by construction, it seems to us, forced and unnatural, placed upon the law by the Attorney-General," defeated; and appealing to the President to use his influence in favor of the new bill, aiming to be more distinctly prohibitive, which had been introduced in the House of Representatives. The publishing agents were requested to have prepared a map of the United States showing the Conference boundaries in outline. Fuller recognition was given to organizations for city evangelization; their powers were increased, and the general organization was constituted as the National City Evangelization Union. The proceedings of the bishops taken in 1898 (see Annual Cyclopædia for 1898) looking to the collection of a twentieth century thank offering during 1901 were approved; their appointment of a commission to have charge of the collection was accepted, and the commission was continued; the designation of the objects to which the funds collected should be applied was ratified; and the duties of pastors

and educational officers in the matter of aiding in the carrying out of the plans of the commission were defined.

II. Methodist Episcopal Church, South.—The numerical returns of this Church give it 5,950 ministers, 14,190 churches, and 1,460,272 members, with church property valued at \$5,400,000.

The business done by the Southern Methodist Publishing House during 1899 amounted to \$383,746, or \$40,447 more than in 1898. The net gain in assets, \$33,889, was less than heretofore in proportion to the operations of the concern. The capital was returned as amounting to \$920,531. A branch house established in Dallas, Texas, had realized a profit of more than \$4,000 in the first year of its existence. The establishment of a branch in China has been determined upon, to take place as soon as a suitable man can be found to manage it.

The reports of the Board of Education represented it as being in better financial condition, taking everything into consideration, than at any previous time. More than \$800,000 had been raised toward a contemplated twentieth century fund of \$1,500,000. The agitation of this movement, it was believed, had done much to arouse enthusiasm on the subject of education. The entire sum of \$25,000 for Haygood Memorial Hall had been raised.

The report of the Epworth League Board showed that 441 senior and 111 junior chapters had been added during the year, with a total of 23,730 members, making the whole number of chapters 4,977 senior and 606 junior, with 245,175 members in all. A number of lapsed and inoperative leagues had been revived and set to work under better conditions, and a more general understanding of the purpose of the League and its plan of work was being diffused throughout the connection. A growth of missionary spirit was also mentioned in the report.

The report of the Sunday School Board showed gains of 30 schools and 12,637 teachers and pupils, the whole number of schools being 13,940 and of teachers and pupils 951,824. The collections from all sources, including those for the Children's Day fund, amounted to \$2,845, which, added to the balance on hand from the previous year, gave \$15,742, while the disbursements had been \$3,204, leaving a balance, April 1, 1900, of \$12,538. Of this sum, \$10,000 were in the form of a loan to the Board of Missions, only the interest of which is used for helping Sunday schools.

The Board of Missions at its annual meeting, May 11, appropriated \$222,541 for the work of the missions in Brazil, China, Korea, Japan, Mexico, Cuba, and among the Indians, the German populations, and the conferences of the Rocky mountains. The apportionment of amounts to be asked from the several conferences contemplated the raising for the ensuing year of \$300,000.

III. African Methodist Episcopal Church.—The following numbers were given in the episcopal address to the General Conference as representing the statistics of this Church for 1900: Of annual conferences, 65; of churches, 5,095; of ministers, 5,439; of communicant members, 663,706; of adherents, 1,659,765; of colleges, 20, with 165 teachers, 5,237 students, and 660 graduates; value of church property, \$10,310,993. Between 1884 and 1899 \$1,140,013 were raised for education.

The twenty-first General Conference (quadrennial) met in Columbus, Ohio, May 7. The episcopal address began with a review of the progress of the African Methodist Episcopal Church during the four years since the preceding General Con-

ference, in which a considerable increase in numbers was spoken of, and as evidences of growth in vital piety were mentioned the better performance of the Church's duties on all observable lines, the emboldening and enlargement of the missionary spirit, a greater grasp of duty and devotion to the performance of it, and the facts that the denomination had built more churches and educated more persons and had had a greater number of conversions than in any previous four years. A financial scheme for the support of the educational interests of the Church was adopted, under which funds were apportioned to 16 institutions of collegiate and academic grade in sums ranging from \$1,600 to \$200 each, and a plan was arranged for raising money for the educational department, (1) by appropriation from the "dollar money," 6 per cent. of which shall be paid to the Secretary of Education; (2) by private donations and bequests, which shall be paid according to the wish of the donor; (3) by the contributions of educational societies, the formation of which was recommended to the churches of the connection; (4) by public appropriations; (5) by the maturing of life insurance policies; (6) by contributions of pastoral charges for educational purposes; (7) by the proceeds of collections taken at the annual conference educational anniversaries; and (8) by the establishment of a day throughout the connection for taking collections in all the churches, the avails of which shall be used exclusively as an endowment fund for the several connectional institutions after present indebtedness is met—the anniversary to be known as Endowment Day, and held on the third Sunday in each September. The office of Secretary of Christian Endeavor Work was instituted, to be filled by appointment by the bishops. Steps were taken for having the Church represented on the Board of Control of the American Bible Society. Provision was made for the incorporation of the African Methodist Episcopal Church in foreign lands where it is working. A measure was passed for debarring from the pulpit any man who is separated from his wife except for the scriptural cause. The report of the committee on the state of the Church advised against the drawing of the color line, and urged that the negro should be allowed to advance in accordance with his social and economical efficiency. Two native Africans were present as delegates from the conferences in South Africa. Five additional bishops were elected—the Rev. Evans Tyree, D.D.; the Rev. M. M. Moore, D.D.; the Rev. C. S. Smith, D.D.; the Rev. C. T. Shaffer, D.D.; and the Rev. J. L. Coppin, D.D., making the whole number of bishops 14. In the adjustment of episcopal districts, 11 were constituted for the United States (with the Bahama Islands), 1 for Canada, Bermuda, the West Indies, South America, Hawaii, and the Philippine Islands (Bishop Smith), 1 for the west coast of Africa (Bishop Moore), and 1 for South Africa (Bishop Coppin).

IV. African Methodist Episcopal Zion Church.—The statistical reports of this Church give it 9 bishops, 96 presiding elders, 3,200 itinerant preachers, 2,800 churches, and 520,000 members. The general statistician reported to the General Conference that the total value of the church property was \$4,865,372; that \$2,177,000 had been raised during the past four years for pastors' salaries, \$614,800 for current church expenses, and \$3,763,996 for new churches and the payment of debts. The sum of \$114,000 had been raised for the general fund, \$7,500 for home and foreign missions, and \$20,000 for purposes of church extension.

The report of the Varick Christian Endeavor Society gave the number of organized societies as more than 600, and that of members as exceeding 20,000.

The General Conference met in Washington, D. C., May 2. The quadrennial address of the bishops reviewed the condition of the Church and presented a number of recommendations of matters to be considered by the Conference. The report of Livingstone College represented that the institution, besides paying its current expenses, had reduced its debt by the amount of \$3,900. The collecting agents for the institution reported upon the collection of funds approaching \$50,000 in amount. The property of the institution was valued at \$117,950, with liabilities of \$19,055. The agent of the Greenville College reported having obtained \$2,705. The report of the educational secretary represented that the school property had been so improved as to be worth \$143,500; that \$75,000 had been raised and 1,073 students had attended the schools. The Rev. John Wesley Alstork, D. D., was chosen bishop in place of Bishop Jehu Holiday, deceased, but no additional bishops were elected. Among the measures of policy adopted was a rule requiring the appointment of presiding elders directly by the bishop instead of by the annual conference on nomination by the bishop, and the abolition of the office of Conference steward, in consequence of which pastors will hereafter make their financial reports monthly to the general steward. A special service was held in commemoration of the one hundredth anniversary of the birth of John Brown.

V. Methodist Protestant Church.—The Statistical Committee of this Church reported to the General Conference in May that there were connected with the 59 conferences 1,645 ministers, 1,135 local ministers and preachers, 177,066 members, 4,250 probationers, 2,001 churches, 531 parsonages, and 2,042 Sunday schools, with 16,680 officers and teachers and 126,031 scholars. The total value of church property was \$4,756,721.

The receipts of the Woman's Foreign Missionary Society for the year were \$7,804. After meeting current expenses, a balance of \$3,397 remained.

The eighteenth quadrennial General Conference met at Atlantic City, N. J., May 18. The president, Dr. Joshua W. Hering, in his address at the opening of the Conference represented that the recommendation he had made at the previous General Conference for a closer contact through correspondence between the annual conferences and the president of the General Conference had been, he was convinced, the means of accomplishing much good. The correspondence had had a wide range, embracing requests for the construction of law and for advice in the management of what were regarded as difficult cases. The Rev. D. H. Stephens was elected president to succeed Mr. Hering. The Committee on Publishing Interests reported that the assets of the two publishing houses were about \$63,000. The circulation of Sunday-school literature had increased to about 140,000 copies. The report of the Board of Ministerial Education remarked upon a substantial increase in the collections, and showed an increase of the permanent fund from \$5,184 to \$16,529, with additional pledges amounting to about \$10,000. The board had in training for the ministry 39 students beneficiaries and about 75 not beneficiaries. Its receipts for the four years since the preceding General Conference had been \$25,495 and its disbursements \$25,609. The Theological Seminary had 14 students on its roll, while 50 of its alumni were preaching in the Church. Six free scholarships had been established dur-

ing the year. The receipts of the Board of Home Missions for the quadrennium had been \$25,607. The Board of Foreign Missions had received during the past four years \$52,688. It returned for the mission in Japan 12 foreign missionaries, 15 native preachers, and 19 stations, having properties, including schools and colleges, valued at \$40,000. The Woman's Foreign Missionary Society returned an income of about \$7,000 a year and property in Japan having an estimated value of \$15,000. The society does educational and evangelistic work, and has 6 missionaries, 76 pupils in the school, a kindergarten, and a number of native workers. A mission had been started in Shanghai, China, with 2 missionaries. The Woman's Home Missionary Society, which was formed to organize missions among the Indians, reported some evangelistic work done and no debt. The Conference decided that the term for which foreign missionaries shall be engaged be fifteen years, with the privilege of returning home every five years. Provision was made for the election by the Conference of a Board for the Woman's Foreign Missionary Society. A proposal to consolidate the Boards of Home and Foreign Missions was referred to a committee, which brought in two reports, one favoring the continuance of the home board under its own management and the other presenting a plan of consolidation. The plan to consolidate the boards was rejected, and the whole matter was then laid on the table. It was decided that a layman has not the right of appeal from the quarterly conference to the annual conference. The question being raised whether a local preacher can act as a lay delegate in the annual conference next preceding the General Conference, the Conference found that the constitution of the Church required that all such delegates should be laymen. The word "catholic," which had been stricken out from the Apostles' Creed by the previous General Conference, was restored. An overture providing for the exclusion from representation in the General Conference of a conference which fails to raise 25 per cent. of its assessments for the general interests of the Church, and an overture looking to the abolition of the electoral college and the election of delegates to the General Conference by a direct vote of the annual conferences, were sent down to the annual conferences. Provision was made for the preparation of a new hymnal. A higher standard of literary qualification in candidates for the ministry was insisted upon.

VI. American Wesleyan Church.—A summary of the statistics of the spring and fall conferences of this Church (omitting three conferences which failed to make reports), published in the Wesleyan Methodist for Jan. 23, 1901, gives the following numbers: Of elders, 393; of superannuated ministers, 33; of quarterly conference licentiates, 304; of members, 15,653; of Sunday schools, 471, with 465 superintendents, 1948 teachers, and 17,290 pupils; total amount of contributions, \$119,244, of which \$61,093 were for preaching, \$10,369 for missionary enterprises, \$1,695 for educational purposes, \$5,629 for the support of Sunday schools, \$861 for superannuated ministers, and the remainder for other benevolences and church building and expenses. At the annual meeting of the Connectional Boards of this Church the reports showed the aggregate assets of the Connectional societies to be \$153,294. The Publishing Association had received \$20,080 for the year and added \$2,650 to its capital, while its total assets were \$67,213. The receipts for foreign missions had been \$7,804, those for home missions \$2,995, and those for the Education So-

ciety \$6,991. The first year's operation of a school of college grade had been satisfactory as to number of students and standard of scholarship. Twenty-nine students had the ministry in view.

VII. Free Methodist Church.—The Executive Board of this Church, at its annual meeting, acted upon the memorial of a member who considered himself aggrieved by the operation of the rule of the Church against membership in secret societies, including labor unions. A preamble and resolutions were adopted, in which the position against secret societies, as expressed in the Discipline and affirmed by the committee in 1899, was reaffirmed, with the declaration: "We are unequivocally opposed to all secret societies, and can not make any change in our rules on this subject, nor can we relax in the least our determination to enforce this rule vigorously without exception or favor. We can not, however, allow this position to be misinterpreted and misconstrued as opposition to organized labor as such. We are not opposed to such proper organizations as seek to promote the interests of laboring men. It would be unreasonable and inconsistent for us to do so, as fully three quarters of our membership are found among the laboring classes. To oppose organized labor that seeks the betterment of the laboring classes would be to oppose our own interests. It has been represented to us that there is a possibility of our mitigating the unfortunate condition of many of our members who hold their loyalty to our Church to be above

VIII. Methodist Church in Canada.—The following is a general summary of the statistics of this Church for 1900: Number of annual conferences, 11; of ordained ministers, 1,790; of probationers for the ministry, 242—making in all 2,032 ministers; of local preachers, 2,290; of exhorters, 1,174; of class leaders, 7,133; of members, 284,901; of Sunday schools, 3,405, with 33,023 officers and teachers and 267,654 scholars; of Epworth Leagues, 1,850, with 74,920 members; of churches and places of worship, 4,334; of parsonages, 1,133; of colleges and educational institutions, 19; value of church property, \$15,307,634.

The 1,850 young people's societies of various names include 760 Epworth Leagues, 717 Epworth Leagues of Christian Endeavor, 70 other societies, and 303 Junior Epworth Leagues, with 48,299 active and 26,621 associate members. These societies contributed in 1899 \$24,004 for league purposes, \$19,902 for missions, \$478 for the Superannuation fund, \$119 for the educational fund, and \$62,043 for other purposes.

The Woman's Missionary Society received from all sources \$42,562. Reports were made at the nineteenth annual meeting of the Board of Managers, Oct. 23, from stations and schools in Japan, China, among the Chinese in British Columbia, among the Indians, and among the French.

IX. Wesleyan Methodist Church (Great Britain).—This Church includes, according to the information furnished by the Conference book steward for 1900:

COUNTRIES.	Ministers.	Lay preachers.	Church members and probationers.	Children in Sunday school.	Churches.
In Great Britain.....	2,202	19,956	481,061	987,046	8,462
In Ireland.....	255	588	28,276	25,270	526
In the foreign missions.....	379	2,000	60,680	65,881	2,450
In the French Conference.....	67	101	1,730	2,682	150
In the South African Conference.....	207	3,522	84,082	36,008	754
In the West Indian conferences.....	94	691	47,309	28,175	437

all temporal considerations by conferring with the representatives of organized labor." A committee was therefore appointed to confer with the chief officers of the labor organizations and set before them the true attitude of the Free Methodist Church in reference to secret societies, and to secure, if possible, an arrangement by which its members may continue in their various employments, and may be employed by the various corporations, contractors, and operators, without pledging themselves to secrecy and thereby violating their church vows. A digest of Free Methodist law was submitted in manuscript, and ordered published upon approval by the superintendents.

The report of the treasurer of the Missionary Board showed that the total contributions for foreign missions, including certain special gifts, had been \$27,929, averaging more than \$1 per member for the whole Church, including probationers, and being the largest amount for one year during the history of the board. The missionary work in South Africa had been interfered with to a considerable extent by the Transvaal war, but no injuries to the property were known of. The appointment of a general superintendent of the work in South Africa, the affairs of the mission in Japan, and the sending of missionaries to Cuba or Porto Rico were considered by the Missionary Board at its meeting in October.

The treasurer of the Board of Education reported a little more than \$1,200 on hand. The board decided to begin disbursing its fund by loans to accredited applicants in moderate sums, according to the provisions of the Discipline, at its regular meeting in October, 1901.

The total income of the Education Committee, as shown in its sixtieth annual report (March, 1900), was £272,923, and the total expenditure was £283,275. The sum of £28,936 had been received as "scholars' pence." The collections and subscriptions mentioned, amounting to £5,965, showed an increase of £88 over the previous year. The 743 day-school departments returned 159,716 pupils, with an average attendance of 128,992. The special Government aid grant allotted to the 6 Wesleyan school associations, amounting to £36,146, had been distributed by the governing bodies according to the necessities of the several schools. Full particulars were given in the report of the principal day-school extensions and enlargements, all going to indicate a revival of the interest taken by the connection in elementary education.

The report of the Home Missionary Society to the Conference showed that its total income had been £42,000. Grants had been voted of £9,809 to dependent circuits, £4,251 toward the support of home missionary ministers, and £3,300 to district home mission committees. The Committee on Work in the Army and Navy reported that 193 ministers were wholly or in part engaged in this field, and that there were 31,275 declared Wesleyans in the services. The Chapel Committee reported upon the building of 95 chapels, at a cost of £288,339; of 22 ministers' houses, at an estimated expenditure of £20,594; and of 10 school-rooms. The new chapels, with enlargements, would give a total additional accommodation of 21,488 sittings. The estimated outlay for 387 contemplated cases was £441,017. The present number of Wesley Guilds was 1,130, with 75,154 mem-

bers, the figures showing an increase of 114 guilds and 4,859 members. The report on education represented that the school departments had increased during the year from 743 to 750, while the number of scholars was 16,787, showing an increase of 1,071. The reports on church membership showed a net increase of 6,225 members.

The annual meeting of the Wesleyan Missionary Society was held in London, April 30. Mr. Edward Aston, of Manchester, presided. The total ordinary and special income, home and foreign, had been £133,757, of which £1,834 had been contributed for special missions and £8,787 had been received from the mission districts. In addition to this sum, £1,874 had been contributed for the relief of West Indian distress, £1,358 for the Indian famine fund, and £300 for special extension funds. The total expenditure had been £133,738, and the separate expenditure of the Woman's Auxiliary for Female Education in Foreign Countries amounted to £13,467 additional. The report from the mission fields accounted for 315 central stations or circuits and 2,450 chapels and preaching places, 366 missionaries, 3,090 catechists, day-school teachers, and other paid agents, 6,133 unpaid agents (local preachers, Sunday-school teachers, etc.), 47,372 church members, 13,265 probationers, and 92,488 pupils. Thirty-six missionaries had been sent out during the year to stations in India, Burmah, China, West Africa, Ceylon, the West Indies, Portugal, South Africa, the Bahamas, Honduras, and Cairo, and 9 missionaries and 2 wives of missionaries had died.

The Conference met at Burslem, July 24. The Rev. Thomas Allen, D.D., was chosen president. A resolution was adopted in the pastoral session in reference to the appointment of assistant secretaries and Conference letter writers, which had heretofore been made by acclamation, that henceforth a small committee should be designated to select a list of names, from which or from other persons who may be nominated the Conference shall make its selections. The pastoral session recommended that a roll of membership, compiled from the class books, be kept by every society, the names of members standing in their several classes, the lists to be corrected, if possible, once a quarter, or at least once a year, and the superintendent being responsible for seeing that the roll is duly kept.

The committee on the proposed change in the order of the sessions reported that all the synods had accepted the resolution passed by the previous Conference, although some had suggested minor alterations in the details, and the measure was finally adopted. Under it the representative conference will hereafter consist of 300 ministers and 300 laymen, and the representative session, instead of being preceded and followed by a pastoral session, will meet first, to be followed by the pastoral session. The report on the Twentieth Century fund showed that 733,313 guineas had been promised, while the total amount actually in hand was £317,443. There were now required 266,687 additional promises to complete the fund (of 1,000,000 guineas). Out of 814 circuits, only 22 had reported inability to complete their promises, and these only represented subscriptions of less than 2,000 guineas. The Executive Committee had decided to give a year's grace for any additional promises now made. Additional subscriptions of more than 40,000 guineas were taken in the Conference, making the whole amount pledged 771,500 guineas, or £810,075. A proposal to form a fund for meeting the expenses of the Connection—to be called the Connectional fund, the income for which shall come from an annual collection in

each chapel and from special donations—having been approved by the synods, was finally adopted. A proposal by the Home Mission Committee for the institution, instead of small, separate district committees for home missions and chapel affairs, of one larger united committee for both purposes, was provisionally approved and sent down to the synods for consideration. It is contemplated that this committee shall consist of 10 ministers and 10 laymen; that it shall give special consideration to all grants to dependent circuits and home mission stations, to all requests for additional or fewer ministers, and to all proposals for the division or amalgamation of circuits; and that it shall advise respecting the purchase of sites and the promotion of schemes for the extension of Methodism in towns and villages. The report on the proposed Ecumenical Conference of Methodism to be held in 1901 provides that the conference shall be constituted of 500 members, 300 being assigned to the western section and 200 to the eastern. The eastern section will comprehend British Methodism and affiliated conferences and mission fields, and the western section the United States and Canadian conferences and their foreign work. The conference will be held in Wesley's Chapel, London, and will be opened on Wednesday, Sept. 4, 1901. Of the eastern section, there were allocated to the Wesleyan Methodist Church 86, Primitive Methodists 34, United Methodist Free Church 18, New Connection 10, Irish 10, and Bible Christian 8. Others were allocated to the South African, Australian, and French Churches. The Conference decided to send out a secretary to the west coast of Africa. A minister was designated to serve as secretary of the Wesley Guild, to give his time entirely to the interests of that organization. A special committee was appointed to consider during the year the best means of providing for the training and equipment of class leaders and of obtaining a large increase of new leaders, especially from the ranks of the young people. Thanks were voted to Mr. Samuel Smith, M.P., for directing the attention of Parliament to the evils of indecent plays in the theaters and of gross license in the streets of London. In view of proposed legislation in reference to secondary education, the Conference by resolution declared itself opposed to grants of public money being made to denominational secondary schools without the provision of a conscience clause, and also recorded its strong opinion that in cases where public school educational authorities establish secondary schools "no formularies distinctive of any denomination should be permitted to be taught therein, and no dogmatic or ecclesiastical tests should be introduced." The committee appointed to consider the relation of baptized children to the Church recommended in the pastoral session that a larger measure of recognition be given to those children, and that more definite attention should be paid to the instruction of them in their duties and privileges as disciples of Christ: that such instruction should be extended to those not baptized, in order to bring them into membership with the Church; that for these persons special classes should be provided to meet for six or eight weeks in the spring of the year; and that more regular instruction should be given in the duties of the parents of the baptized children. These recommendations were adopted, to be sent down to the synods, and the committee was re-appointed. The committee having in charge the revision and completion of the regulations appended to the rules of the society reported that it had collated the various regulations contained in the resolutions of past conferences, and

that in some instances changes had been suggested. One paragraph dealing with public worship had raised the question of the use of the liturgy in Wesleyan service, relating to which different views were expressed as to the use of the Book of Common Prayer and of the Psalter. These questions were referred back to the committee.

X. Primitive Methodist Church.—A report presented to the Conference in June reviewing the growth of this Church since its foundation in 1810 with 8 members gave the present number of members as 196,408, with nearly 1,200 ministers, 614,093 hearers, and 4,548 chapels having a total value of £3,950,182. These figures represented the present condition of the denomination after setting off more than 5,000 members who had joined the United Methodist Church in Australia.

The Sunday-school department reported 4,350 schools, with 60,867 teachers and 467,790 pupils, 29,166 of whom were members of the Church and 26,177 more were members of catechumen classes. Twelve hundred and twenty-one Christian Endeavor Societies returned 41,681 active and associate members, 27,652 of whom were members of the Church. The connectional temperance secretary reported 2,062 Bands of Hope and 299 adult temperance societies, with nearly 300,000 members in all.

The annual meeting of the Primitive Methodist Missionary Society was held in London in May. The year's receipts of the general fund had been £15,276—£680 less than in the previous year—and those of the African fund £5,898. There were now in Africa 10 principal stations and 31 out stations, 12 European and 3 native missionaries, with 3 trained native evangelists, 53 native local preachers, 8 native class leaders, and 1,466 members, the last number showing an increase of 55. The larger proportion of the African stations were in the field affected by the operations of the South African War, and had suffered considerably therefrom. Others were on the African mainland, opposite the island of Fernando Po, one of the stations being in a district which would probably on the adjustment of boundaries fall to the Germans. In that case the mission and the people would remove to British territory.

The Conference met at Bristol, June 13. The Rev. Joseph Odell was chosen president. Reports were made that the sales at the Book Room had amounted to £37,814, or £2,352 more than in any previous year; that the income of the Connectional fund had reached £7,378, the largest amount in its history; that the Chapel Aid Association had a deposit account of £232,446, and was helping chapel trustees to reduce their liabilities automatically; that the General Chapel fund had made grants of £1,006 during the year, and the Chapel Loan fund had assisted trustees to the extent of £2,000; that the Connectional Insurance Company had 5,237 current policies and a reserve fund of £27,623; that 309 annuitants were supported by the Superannuated Ministers' Widows' and Orphans' fund; that the Aged and Necessitous Local Preachers' fund, with an income increased by £150, had granted aid to 235 applicants; and that the Jubilee Thanksgiving fund had reached its goal of £50,000. The Missionary Society returned a total income of £17,561. A scheme of church extension was approved by the Conference under which an annual expenditure of £20,000 a year for five years in building new churches in populous suburbs and watering places is contemplated. To the special fund which it is proposed to raise for this purpose, Mr. W. P. Hartley, J. P., offered to give 25 per cent. of all the

connection should raise. The Conference determined to continue its mission work and to arrest at all costs the gradual decline to which it had been subject. The proposition for union with the Bible Christian Church submitted by the preceding Conference to a vote of the circuits had been rejected by a very large majority. The present Conference, after discussion, decided, that while no further negotiations for organic union should be pursued, fraternal relations should be maintained, and a committee of 6 members was appointed to act with representatives of the Bible Christians. The resolution on education, which was adopted unanimously, declared that no system of public education is satisfactory which does not give popular management where public money is granted, and which does not entirely abolish all sectarian tests where public grants are received.

XI. Methodist New Connection.—The one hundred and fourth annual Conference met at Newcastle, June 11. The Rev. George Stephenson Hornby was chosen president. The Annual Committee having been charged by the preceding Conference with the consideration of the expediency of providing for Connectional extension, reported adversely to the institution of an entirely new fund, and to the making of another special appeal, and advised the utilization of existing institutions and the larger development of ordinary resources. The Conference, however, decided upon immediate action, for which a committee was appointed, and the whole question was further referred to a larger committee for consideration during the year. The three young people's departments were placed under the care of a single committee. The policy was adopted of making a minister in active service instead of a superannuate, as heretofore, secretary of the two mission funds. Resolutions were passed condemning the state regulation of vice, the endowment of a Roman Catholic university in Ireland at the public expense, the new education code, sectarian training colleges, and "sacerdotalism and lawlessness" in the Established Church. The Twentieth Century Evangelical Mission of the Free Church Federation was commended to the Connection.

XII. United Methodist Free Churches.—The Annual Assembly met at Manchester, July 10. The Rev. Frederick Galpin was chosen president. Reports were made concerning the Connectional funds that by the aid of generous gifts a number of heavy trust liabilities had been removed and new enterprises made possible. Debts on chapel buildings, schools, etc., had been reduced by £30,000, £67,500 had been spent in building, and the value of the connectional property had been increased by £60,000. The capital of the Chapel Loan fund amounted to £13,800. The Beneficent and Superannuation fund returned 78 annuitants and an expenditure of £2,839. The capital of the Insurance fund amounted to £3,000. The Endowment fund of Manchester College amounted to £18,500. The committee of the Twentieth Century fund reported that more than 86,000 guineas had been promised and £21,307 had been paid in. The returns from foreign stations were not yet to hand. The subject of a reorganization of home church extension enterprises, involving a contemplated possible separation of home and foreign interests, was referred to the Connectional and Twentieth Century Committees for consideration. Reports were made of the London Chapel Extension fund, and of the work among young people. The question of appointing a minister to have combined charge of the temperance and young people's organizations was referred to the Connectional Committee. A

message of fraternal greeting was sent to the Wesleyan Conference with the expression of the hope that ere long, by the exercise of brotherly love, a federation of Methodist churches might be brought about.

XIII. The Bible Christian Church.—The eighty-second Bible Christian Conference met at Penzance, Aug. 1. The Rev. John Luke was chosen moderator. The Chapel report showed that £13,485 had been raised toward renovations and the erection of new chapels. The total income, including £8,825 of borrowed money and a balance of £4,935, had been £42,402, and the expenditure £36,957. The Christian Endeavor report adduced facts tending to show that the societies of that name were a source of increasing strength to the churches. The treasurer of the New Century fund reported that nearly two thirds of the sum of £25,000 aimed at had been promised, and one half of the amount promised, or £8,000, had been paid. Provisions were adopted relative to the placing of additional married preachers upon circuits of designated strength and to giving Conference assistance in their support. In view of a reported decrease of 53 members, a resolution was adopted embodying the question whether present-day Christianity is as deep and aggressive as it should be. Regret was expressed by resolution at the complete failure of the negotiations for union with the Primitive Methodist Church, and a committee was appointed to act with the similar committee appointed by the Conference of that Church in maintaining the most friendly relations between the two denominations. The responses of the quarterly and district meetings to the resolution sent down by the previous Conference for excluding holders of licenses for the sale of intoxicating liquors from office in the churches expressed a variety of opinions and embodied diverse recommendations. The Conference reaffirmed its opinion that the Church should be free from complicity with the liquor traffic, and expressed the hope that sellers of intoxicants would not be elected to office or admitted to membership in any of the societies.

XIV. Independent Methodist Churches (British).—At the ninety-fifth annual Conference of Independent Methodist Churches, held at Stretford, June 18, reports were made of 148 churches, 307 ministers, 8,303 members, 26,295 children, and 2,841 teachers and officers in Sunday schools, and 78 Christian Endeavor Societies. The churches were 2 and the Christian Endeavor Societies 20 more in number than in 1899, and the members 241 less. The Book Room Committee reported a slight falling off in sales. The publication of a hymn book and a tune book was decided upon. Eight mission halls were maintained by the churches.

XV. South African Conference.—The reports made to the South African Conference showed that notwithstanding the war there had been an increase of 193 English and 2,244 native members. The native services had been kept up at Kimberley through all the hardships of the siege and under the restrictions of martial law. Out of 91,000 native members reported, 80,000 were pure aborigines.

XVI. Australasian Methodist Church.—This Church returns for 1900 775 ministers, 8,783 lay preachers, 118,984 members and probationers, 3,973 Sunday schools with 21,618 officers and teachers and 214,734 pupils, and 3,438 churches. The question of union with other Methodist bodies into a single Methodist church for the colony having been submitted, in accordance with the terms of the projected plan of union, to the members of the Primitive Methodist Church in New

South Wales, a very large majority (3,474 to 385) voted in favor of the measure. The Wesleyan Conference had already agreed to union if the voting in the Primitive Methodist Church should be decisively in favor of it. The Federal Council of the Methodist Churches in the colony, acting upon this result, has directed a basis of union to be prepared, including the details necessary to give effect to the measure in accordance with the action of the General Conference. The accounts of the Australasian Methodist Board of Missions show an excess in the receipts for 1899 of \$7,693 over the expenditures, while for a few years past the society has had to face a deficiency averaging \$5,500 a year. A sum of \$17,500 still standing to the credit of the society has been placed in a "legacies capital investment account." By the consummation of Methodist union in South Australia the mission maintained for many years at Yunnan-Fu, China, passed under the control of the General Board. A deputation appointed by order of the General Conference is corresponding with the churches in Fiji respecting propositions for giving fuller powers of self-government to the mission district of that country, and is commissioned to consider other matters which have arisen during the state of transition through which the colony is passing. Fiji is the largest contributor of men and money to the Australasian Wesleyan mission work.

MEXICO, a federal republic in North America. The legislative power is vested in the Congress, consisting of a Senate of 56 members, 2 from each state and the federal district, and a House of Representatives containing 227 members, 1 to 40,000 of population. Representatives are elected for two years by the votes of all respectable adult male citizens, and Senators by the same electorate for four years, the same term as the presidency. Porfirio Diaz was first elected President in 1876, and again after an intermission, and since 1887, when the Constitution was so altered as to permit a President to succeed himself, he has been elected consecutively. The Cabinet in the beginning of 1900 was composed as follows: Secretary of Foreign Affairs, I. Mariscal; Secretary of the Interior, Gen. Gonzalez Cosio; Secretary of Justice and Public Instruction, J. Baranda; Secretary of Fomento, Fernandez Leal; Secretary of Finance and Commerce, J. I. Limantour; Secretary of Communications and Public Works, F. Z. Mena; Secretary of War and Marine, Gen. F. B. Berriozabal, Secretary of the Treasury, F. Espinosa. Porfirio Diaz was re-elected President of the republic in the beginning of October, 1900, and was inaugurated on Dec. 1 to serve his sixth consecutive term, his seventh term in the office.

Each of the states has its constitution and autonomous government, with an elective governor and legislature. No state may levy duties on products of other states. All of them have adopted the federal civil and criminal codes with the exception of Vera Cruz and Mexico.

Area and Population.—The area of Mexico is 707,005 square miles. The population in 1895 was 12,630,863, being 16.4 to the square mile, about 19 per cent. being of pure white, 38 per cent. of pure Indian, and the rest of mixed white and Indian blood. All have had the same civil status since 1824, but the Indians and half-breeds are generally of a much lower order of intelligence than the whites. The people are Roman Catholics, except a few converts to Protestantism. Church and state have been separated. Education is nearly all the states is gratuitous and compulsory, and is aided by grants from the federal treasury. There were 6,141 schools of various

grades supported by the federal and state governments in 1897, and 1,953 maintained by municipalities; total number of teachers, 10,327; total average attendance, 391,657; cost of maintenance, \$4,425,512. Besides these the clergy and private teachers taught 71,337 pupils on the average in 2,204 schools, making the total number of schools 10,298, with 462,994 pupils, out of 669,560 on the rolls, in average attendance, 293,732 of whom were boys and 169,262 girls. The higher schools have about 21,000 students.

Finances.—The receipts of the Federal treasury for the year ending June 30, 1898, were \$60,130,212; expenditure, \$53,499,541. The receipts include sums borrowed to pay railroad subsidies and temporary advances in addition to the ordinary revenue. The ordinary revenue for 1900 was estimated at \$54,913,000, and expenditure at \$54,886,756; revenue for 1901 at \$58,234,000, and expenditure at \$58,009,082. About 40 per cent. of the revenue is derived from customs, and 45 per cent. from internal revenue taxes. Of the expenditure over 46 per cent. has been required to pay the interest and sinking fund of the debt, and 10 per cent. for railroad subsidies, leaving 44 per cent. for the expenses of government and the army. The 6-per-cent. gold loans of the Mexican Government and the 5-per-cent. bonds of the Tehuantepec Railroad were consolidated in 1899, and converted into a new loan of £22,700,000, paying 5 per cent. interest. The 6-per-cent. silver bonds were all redeemed except \$162,000. The 3-per-cent. internal consolidated debt amounted to \$50,669,125, the 5-per-cent. redeemable internal debt to \$42,874,900, and railroad bonds to \$9,574,025 at the beginning of 1899, and there was a floating debt of \$1,401,808. The national wealth of Mexico is estimated at \$945,000,000. The revenue of the state governments in 1897 amounted to \$13,382,711, and their expenditure to \$13,441,966; the revenue of the municipalities to \$10,380,023, and expenditure to \$10,092,662.

Mexico has 4 mints, the principal business of which is to coin standard Mexican silver dollars, weighing 27.073 grammes 0.9028 fine, containing therefore 24.440 grammes of pure silver, 0.3036 gramme more than the United States standard dollar. The bulk of this coinage is shipped abroad, and finds its way to China, Farther India, and the islands of the Indian Ocean, where it is the common medium of exchange. Silver is the standard of value in Mexico, although gold is coined to the amount of about \$500,000 a year. The coinage of silver dollars in 1898 was \$21,427,057; in 1897, \$19,296,009; in 1896, \$22,634,788; in 1895, \$27,628,981; in 1894, \$30,185,591; in 1893, \$27,169,876; in 1892, \$25,526,717; in 1891, \$24,237,449; in 1890, \$24,323,728. There is a small circulation of the credit notes of some of the banks, but silver is the main currency of the country. In 1900 the drain of silver to the East was unusually large, owing to the hostilities in China, and this produced a serious scarcity of money in Mexico.

Railroads, Posts, and Telegraphs.—The length of railroads in operation in 1899 was 8,040 miles, besides 127 miles of tramways. There were 300 miles of railroad under construction.

The telegraphs had a length of 41,532 miles in 1899, of which 27,608 miles belonged to the Federal Government, the rest to the state governments or to railroad and telegraph companies. The number of dispatches in 1898 was 2,178,181. The telephone lines had a length of 7,459 miles.

The number of letters and postal cards that passed through the post office during the fiscal year 1899 was 122,620,216. The postal receipts were \$1,595,818; expenses, \$1,991,921.

The Army and Navy.—The strength of the regular army is 22,605 infantry, 7,249 cavalry, and 2,280 artillery; total, 32,143 men of all ranks. The number of officers is 2,068. In the cavalry are included 261 rural guards and 118 gendarmes. The war strength of Mexico is estimated at 123,500 infantry, 20,000 cavalry, and 8,000 artillery. All able-bodied citizens from the age of twenty to that of fifty are liable to military service. The army has had practice of late in subduing the Yaqui Indians of northern Mexico, who will not submit to the rule and jurisdiction of the Mexicans, and have been encouraged in their rebellion by some of the Americans residing in the state of Sonora. The Mayas of Yucatan in 1900 also rose against the Government and, having secured modern weapons, held Gen. Bravo with 3,000 soldiers at bay.

The fleet consists only of two old dispatch vessels, two small unarmored gun vessels, and a steel training ship, the Zaragoza, of 1,200 tons, built in France in 1891. There are four gunboats and five first-class torpedo boats under construction. The officers number about 90, and about 500 men are in the crews.

Commerce and Production.—Agriculture in Mexico is generally in a backward state. The soil is exceedingly fertile in many districts, and the climate varies with altitude, so that tropical and subtropical vegetation flourish in some places, and the grains and fruits of the temperate zone in others not far distant. The public lands, which are of great extent, are being surveyed by companies which receive a third of the land that they demarcate, while the other two thirds are offered for sale to colonization companies or to private individuals. Down to 1896 the companies had surveyed 59,397,952 hectares, receiving as their share 19,612,806 hectares. Of the remainder the Government disposed of 1,812,517 hectares. There are 32 agricultural settlements, 13 of which, containing 3,926 colonists, were established by the Government and 19, with 4,036 colonists, by companies and individuals by authority of the Government, which has assisted the colonists by providing vines, olive trees, fruit trees, vegetable seeds, and silkworms. Orange cultivation is extending, and the fruit finds a ready market in the United States. There were 21,136 tons of rice, 42,054,684 hectolitres of corn, 263,987 tons of wheat, 65,803 tons of sugar, 61,856 tons of panocha, 44,847 tons of molasses, 5,474,450 hectolitres of spirits, 50,226 tons of henequen, 32,915 tons of cotton, 76,638 tons of logwood, 590 tons of cacao, 21,838 tons of coffee, 8,956 tons of tobacco, and 812,690 hectolitres of rum produced in 1897. There are about 2,900 factories for sugar and aguardiente. In 1896 there were 107 cotton factories, consuming 53,273,397 pounds of cotton, about half of it grown in Mexico and half in the United States.

Mining is being constantly extended. In 1897 there were 109 mines operated for gold alone, 254 for gold and silver, 49 for gold and other metals, 310 for silver alone, 184 for silver and other metals, 18 for copper alone, 8 for copper and lead, 1 for platinum alone, 31 for lead alone, 4 for lead and iron, 12 for iron alone, and 9 for antimony, cinnabar, or tin. The value of the ores raised was \$66,137,240. The number of miners employed was 98,852. The value of gold presented at the assay offices and mints in 1897 was \$3,909,782, against \$4,247,760 in 1896, \$2,674,278 in 1895, \$2,260,865 in 1894, and \$1,902,296 in 1893; the value of silver in 1897 was \$54,946,034, against \$53,797,061 in 1896, \$38,934,192 in 1895, \$34,845,543 in 1894, and \$30,383,429 in 1893.

The total value of imports in the year ending June 30, 1899, was \$50,869,394. The exports of merchandise were valued at \$63,296,540, and of precious metals at \$85,181,600; total, \$148,478,140. The value of silver bullion exported was \$42,438,635; silver coin, \$14,966,358; silver ore, \$9,854,854; gold, \$7,921,764; coffee, \$7,936,908; henequen, \$18,711,325; timber, \$3,263,011; hides and skins, \$3,583,798; cattle, \$4,723,500; tobacco, \$2,515,606; ixtle fibre, \$865,966; zacaton root, \$1,055,669; vanilla, \$1,283,057; beans, \$821,136. The trade was distributed among foreign countries in 1899 as shown in the following table:

COUNTRIES.	Imports.	Exports.
United States.....	\$24,164,897	\$108,553,466
Great Britain.....	9,211,281	14,096,178
France.....	5,917,167	6,262,298
Germany.....	5,677,925	4,020,307
Spain.....	2,969,396	1,172,948
Other countries.....	2,923,258	19,393,928
Total.....	\$50,869,394	\$148,478,140

MICHIGAN, a Western State, admitted to the Union Jan. 26, 1837; area, 58,915 square miles. The population was 212,267 in 1840; 397,654 in 1850; 749,113 in 1860; 1,184,059 in 1870; 1,636,937 in 1880; 2,093,889 in 1890; and 2,420,982 in 1900. Capital, Lansing.

Government.—The following were the State officers in 1900: Governor, Hazen S. Pingree; Lieutenant Governor, O. W. Robinson; Secretary of State, Justus S. Stearns; Treasurer, George A. Steel; Auditor, Roscoe D. Dix; Attorney-General, Horace M. Oren; Superintendent of Instruction, Jason E. Hammond; Insurance Commissioner, Harry H. Stevens; Land Commissioner, W. A. French; Labor Commissioner, Joseph L. Cox; Food Commissioner, E. O. Grosvenor; Dairy Inspector, L. H. Kirtland; Salt Inspector, J. B. Caswell; Adjutant General, F. H. Case; Railroad Commissioner, C. S. Osborn; Bank Commissioner, George L. Maltz; Game Warden, Grant M. Morse; Analyst, R. E. Doolittle; President Board of Corrections and Charities, George D. Gillespie; Tax Commission, Milo D. Campbell, A. F. Freeman, Robert Oakman; Forestry Commission, Arthur Hill, C. W. Garfield, W. A. French *ex officio*; Library Commission, D. D. Aitkin, T. P. Hall, C. G. Luce, C. H. Hackley; Chief Justice of the Supreme Court, R. M. Montgomery; Associate Justices, Frank A. Hooker, Joseph B. Moore, Charles D. Long, Claudius B. Grant; Clerk, C. C. Hopkins. All were Republicans.

The term of the State officers is two years. They are elected in November of the even-numbered years. The Legislature, composed of 32 Senators and 100 Representatives, meets biennially in January of the odd-numbered years.

Population.—The census returns for 1900 give the population of the State 2,420,982, and of the counties as follows: Alcona, 5,691; Alger, 5,868; Allegan, 38,812; Alpena, 18,254; Antrim, 16,568; Arenac, 9,821; Baraga, 4,320; Barry, 22,514; Bay, 62,378; Benzie, 9,685; Berrien, 49,165; Branch, 27,811; Calhoun, 49,315; Cass, 20,876; Charlevoix, 13,956; Cheboygan, 15,516; Chippewa, 21,338; Clare, 8,360; Clinton, 25,136; Crawford, 2,943; Delta, 23,881; Dickinson, 17,890; Eaton, 31,068; Emmet, 15,931; Genesee, 41,804; Gladwin, 6,564; Gogebic, 16,733; Grand Traverse, 20,479; Gratiot, 29,889; Hilldale, 29,865; Houghton, 66,033; Huron, 34,162; Ingram, 39,818; Ionia, 34,329; Isco, 10,246; Iron, 8,990; Isabella, 22,784; Jackson, 48,222; Kalamazoo, 44,310; Kalkaska, 7,133; Kent, 129,714; Keweenaw, 3,217; Lake, 4,957; Lapeer, 27,641; Leelenaw, 10,556; Lenawee, 48,406;

Livingston, 19,664; Luce, 2,983; Mackinac, 7,703; Macomb, 33,244; Manistee, 27,856; Marquette, 41,219; Mason, 18,885; Mecosta, 20,693; Menominee, 27,046; Midland, 14,439; Missaukee, 9,308; Monroe, 32,754; Montcalm, 32,754; Montmorency, 3,234; Muskegon, 37,036; Newaygo, 17,673; Oakland, 44,792; Oceana, 16,644; Ogemaw, 7,765; Ontonagon, 6,197; Osceola, 17,859; Oscoda, 1,468; Otsego, 6,175; Ottawa, 39,667; Presque Isle, 8,821; Roscommon, 1,787; Saginaw, 81,222; St. Clair, 55,228; St. Joseph, 23,889; Sanilac, 35,055; Schoolcraft, 7,889; Shiawassee, 33,866; Tuscola, 35,890; Van Buren, 33,274; Washtenaw, 47,761; Wayne, 348,793; Wexford, 16,845.

The population of Detroit is 285,704; in 1890 it was 205,876. It is thirteenth in size among the cities of the country. Grand Rapids has 87,565 inhabitants; Saginaw, 42,745; Bay City, 27,628; Kalamazoo, 24,400; Muskegon, 20,818; Port Huron, 19,172; Battle Creek, 18,563; Lansing, 16,483; Ann Arbor, 14,509; Manistee, 14,260; Ishpeming, 13,253; West Bay City, 13,119; Flint, 13,105; Menominee, 12,818; Alpena, 11,803; Sault Ste. Marie, 10,533; Marquette, 10,058. There are 78 chartered cities and 305 incorporated villages.

Finances.—The total State tax for 1900 was \$2,908,680.60, less by \$817,154.35 than that of 1899. It was levied on a total assessed valuation of \$1,105,100,000. Various purposes for which the tax is levied are as follow: University, \$276,275; Agricultural College, \$74,000; Normal College, \$69,800; Central Normal School, \$25,000; Northern Normal School, \$7,500; College of Mines, \$56,250; State Library, \$7,500; Soldiers' Home, \$110,000; Home for Feeble-minded, \$78,000; State Public School, \$51,000; School for the Deaf, \$117,850; School for the Blind, \$28,115; Asylum for Insane, \$12,431; State Prison, \$35,000; Industrial School for Boys, \$62,750; Industrial Home for Girls, \$45,647; Fish Commission, \$25,000; compiling Adjutant General's records, \$3,000; Food Commissioner, \$18,000; Dairymen's Association, \$300; Library Commissioners, \$800; military fund, \$89,665.64; Naval Brigade, \$11,208.20; Board of Health, \$450; Weather Service, 1,000; war loan, 1898, \$138,137.50; current expense of prisons, \$90,000; current expense of asylums, \$504,689.32; general purposes, \$982,262.

The item of \$982,262 for general purposes includes all salaries and expenses of judicial officers, salaries of State officers and department clerks, expense of the Legislature, awards of the Board of State Auditors, expenses of the Pardon Board, cost of conveying persons to and from State institutions, cost of caring for juvenile offenders, expenses of the Game Warden, expenses of the State Live Stock Sanitary Commission, expenses of the banking department, interest and fees collected for counties and paid to them by the State, etc.

The State Tax Commission increased the assessments in some localities, and many of the local assessors in the upper peninsula and other places attacked the authority of the board, declaring that the general tax law specifically stated that the taxes should be spread on the assessments fixed by the local boards of review, and nowhere authorized the use of assessments made by the State commission. The city assessor of Ishpeming having refused to use the figures of the commission, the board applied for a mandamus to compel him to do so. In his answer he attacked the constitutionality of the law creating the commission, as well as the validity of its order and subsequent action in reviewing and certifying the roll, and also the claim that the law requires the tax to be spread on the valuations fixed by the commission. The court granted the mandamus, which virtually sustained the increase made by the board

in all localities, amounting to \$70,000,000. The question of the constitutionality of the law, the court said, must be regarded as settled by the decision of the Tax Commissioners against the Board of Assessors of Grand Rapids.

The total primary school money paid the counties in the year was \$1,531,636.35. Of the 83 counties, 50 received more in school money than they paid in State taxes.

Militia.—The organized militia force is 2,905, and the number of men available for military duty, but unorganized, 260,000.

Education.—The building for the Northern Normal School, at Marquette, was finished in the summer. It stands on a bluff facing Lake Superior. A dormitory has been provided, where 100 students can be lodged and 150 accommodated in the dining hall, at an expense for room and board of about \$3.75 a week. About 1,500 books

have been bought for beginning the library, and a gift of \$5,000, in five yearly installments, has been received for the art department. The year began with an enrollment of 45, which increased to 90, 3 of whom were graduated. A summer session of six weeks is held.

The enrollment for the year at the Agricultural College was 627, a gain of 99 over the year next preceding. For the first time in the history



AARON T. BLISS,
GOVERNOR OF MICHIGAN.

of the institution, the students in the mechanical course outnumber those in the agricultural course—232 mechanicals to 217 agriculturals. There were 111 students in the women's course and 71 in the special short courses.

A new dormitory for the woman students was dedicated Oct. 25. A dairy building is to be dedicated in February, 1901. Prizes have been offered by friends of the college for competitions in stock judging, military drill, and notes on ornamental trees and shrubs. A valuable collection of fungi secured in the vicinity of the school by a former professor, G. H. Hicks, has been bought for the college. An offer was received in November, and taken under advisement, from Ashland College, at Grant, to put that college, with its land and equipment, under the control of the State Board of Agriculture, to be used as a branch experiment station for the benefit of that portion of the State. Ashland College was founded about twenty years ago as a Scandinavian sectarian school, but was reorganized in the spring of 1900.

At the thirteenth commencement of the College of Mines, Aug. 30, the degree of engineer of mines was conferred upon 22 young men, and that of bachelor of science upon 16.

A new course has been instituted at the University of Michigan, at Ann Arbor, called the commercial, designed to fit the student to handle the larger commercial and municipal questions that are coming up for settlement.

Charities and Corrections.—The report of the Asylum for the Insane, at Kalamazoo, shows the number in June, 1899, to have been 1,308, and the expenses \$214,856.

The School for the Blind had 113 pupils in September. An association of the alumni has been formed, which will endeavor to secure from the State an industrial school for the blind; it has also a bureau for securing employment for the blind.

There are 282 inmates at the Home for the Feeble-minded and Epileptic, and 684 applications are on file.

The School for the Deaf and Dumb, at Flint, had an attendance of 431 the past year.

There were 615 boys at the Industrial School in October; the buildings are designed to accommodate 500. About an equal number of boys are out on parole.

The prison at Marquette, at the close of the fiscal year, had 205 convicts; the average cost of maintenance is 35.06 cents a day.

The Board of Corrections and Charities, in its biennial report, suggests an amendment to the Constitution, permitting the enactment of a law for indeterminate sentences.

A very large number of pardons, paroles, and commutations of sentence were granted by Gov. Pingree, especially in the closing weeks of his administration. A list of those in December, 1900, gives about 44 pardons, 49 paroles, and 22 commutations. Nineteen who received them were serving life sentences.

Railroads.—The report of the Railroad Commissioner shows that 81 companies reported in the year, 52 being regularly operated lines, and the others leased or proprietary lines or lines not in operation. The total main line mileage in the State is 7,928.80, an increase of 122.90 miles over the previous year. The total mileage, including sidings and spurs, is 10,497.07 miles.

In 1899 793 persons were killed or injured by railroad accidents, an increase of 197 over those in the previous year. Of the killed, 2 were passengers, 54 employees, and 138 were reported as "others." More than half of the increase of killed and injured were trespassers upon railroad property or trains.

The total tax levied on railroads this year, based on the earnings of 1899, was \$1,240,845.27, an increase of \$153,228.38 or 16.69 per cent. over the last year's levy, the increase being due to the increase of earnings. The tax of but one company shows a decrease from last year. The earnings in the State, to Dec. 1, were \$35,889,644.63, an increase of \$3,109,967.55 over the same period of the previous year.

The Iron Range and Huron Bay Railroad, which was built some years ago as an outlet for the Marquette iron range to Lake Superior, was sold this year for \$110,000, the purchasers' object being only to secure the rails. The cost of the road, including a fine wharf at Huron Bay, was \$1,180,000. Before it was completed the situation in the iron region began to change. Although the road was made ready for business, no train ever ran over the line and not a pound of freight was ever transported.

Building and Loan Associations.—The report on these associations by the Secretary of State, published in November, shows that 66 were doing business, 1 having been incorporated and 4 having closed up their affairs during the year. No foreign associations are authorized to do business in the State. The following totals are given: Assets, \$10,118,876.01; receipts for the year, \$6,417,118.53; liabilities, \$10,118,876.01; disbursements, \$6,280,982.90; number of shares issued in the year, 68,760; number of shares matured, 9,743; number withdrawn and otherwise eliminated, 62,757; number of shares in force at the close of the

year, 265,640. For the first time in several years there is a notable increase in the number of shares issued, and many associations have reduced their loaning rates.

Insurance.—At the time of the annual report in June, 2 Michigan insurance companies, 118 companies of other States, and 46 companies of foreign countries were doing business in Michigan. The risks written in Michigan in the year covered amounted to \$386,973,175; premiums received, \$4,664,195; losses incurred, \$2,895,356. Examinations resulted in the collection of \$12,600 taxes on unreported insurance, a large portion of this amount being collected from companies that, in reporting their business, had deducted premiums received for reinsurance.

Banks.—The report of the commissioner covering the condition of the 191 State banks and 3 trust companies, June 29, shows the resources and liabilities to be \$124,820,305. The loans and discounts were \$52,522,259; bonds, mortgages, and securities, \$44,750,517; savings deposits, \$57,873,126.

The annual report, which was made in February, shows the net increase in State bank capital in a year to have been \$222,000. Nine State banks were in the hands of receivers, but none had failed in the year.

Products and Industries.—In the production of iron ore in the country in 1899, Michigan led with 9,146,157 long tons out of a total of 24,683,173.

While the log and lumber industry is greater now in some other States than in Michigan, which for some time was the leader, the highest point of production having been reached in 1888 with a total of 4,292,189,914 feet, still the production of 1899 was an improvement over that of 1898 by about 170,000,000 feet, and the quantity on hand at the close of the year was smaller. The compilation for 1899 gives the following figures: Total lumber output, 2,338,575,135 feet; total shingle output, 1,444,578,000; lumber on hand Dec. 1, 682,818,930 feet; shingles on hand, 185,020,000.

The copper product for 1898 was 70,462 long tons, of a total of 234,271 in the United States.

The growth of the beet-sugar industry has been remarkable, the State now standing second. The production for the last fiscal year was more than 34,000,000 pounds. The claims filed for the bounty of one cent a pound amounted to \$331,508.73.

Since Jan. 1, 1897, 1,005 new factories have been established, which this year gave employment to 23,000 persons.

Lands.—The lands held by the State at the close of the fiscal year June 30, 1900, were classified as follow: Primary school lands, 155,989.82 acres; university, 40; agricultural college, 62,523.29; salt springs, 280; asylum, 1,122.98; swamp, 81,648.56; tax homestead, 235,441.12; total, 537,045.77 acres. The number of acres sold during the year was 47,211.24, and the amount received \$144,595.07. In addition to these sales, 2,409.13 acres of homestead lands were patented. There were forfeited to the State for nonpayment of interest a total of 897.05 acres.

The General Government patented to the State 1,120 acres of swamp land, and lists embracing 159.65 acres approved to the State were received, for which patents will follow in due course.

Legislative Sessions.—Besides the special session which began Dec. 18, 1899, and ended Jan. 6, 1900, there were two special sessions in this year. In the proclamation calling the session that closed Jan. 6, the Governor said:

"The fortieth Legislature enacted two laws, one of which was an act to provide for the assessment and levy of taxes upon the property of railroad,

express, telegraph, and telephone companies, known as the 'Atkinson law'; the other is an act amending the general tax laws by creating a board of State tax commissioners with supervisory control of tax officers, empowered to review and correct assessment rolls, and with other powers. It is generally known as the 'Oren law.' On April 26 last, the Supreme Court rendered a decision which practically invalidated the 'Atkinson law.' Because of that decision, an amendment to the Constitution is imperatively necessary, before laws can be enacted providing for the equal taxation of all property."

It was for the purpose of providing for the submission of such an amendment that the Legislature was called. The House passed such a resolution, and several bills increasing railroad taxation, but they were all defeated in the Senate. A bill for municipal ownership also was defeated. The Governor sent another message, asking for a joint resolution authorizing a suit against the Henderson-Ames Company to recover the money lost to it by the State in the transactions of the military board, and such a resolution was passed, as was also a concurrent resolution asking the State Board of Auditors to allow all lawful expenses incurred by Ingham County in the trial of State officers. The Auditor General was authorized to pay relief claims of soldiers of the Spanish war to the amount of \$40,000.

A second special session for the same purpose was called to meet Oct. 10. The Governor's message dealt entirely with the issues mentioned in the call, the consideration of a joint resolution permitting submission to the people of a constitutional amendment authorizing taxation of railroads and other corporations on the cash value of their property instead of on earnings, as at present, and the repealing of the special charters of the Michigan Central, Lake Shore, and Grand Trunk Railways. This time the bills recommended were passed, and adjournment was taken Oct. 15.

The only other measure passed was an appropriation of \$2,500 for rebuilding the wall of the industrial school. Following is the text of the constitutional amendments:

"SECTION 10. The State may continue to collect all specific taxes accruing to the treasury under existing laws. The Legislature may provide for the collection of specific taxes from corporations. The Legislature may provide for the assessment of the property of corporations at its true cash value by a State board of assessors, and for the levying and collection of taxes thereon. All taxes hereafter levied on the property of such classes of corporations as are paying specific taxes under laws in force on Nov. 6, A. D. 1900, shall be applied as provided for specific taxes in section 1 of this article.

"That section 11 of Article XIV of said Constitution be amended so as to read as follows:

"SEC. 11. The Legislature shall provide for a uniform rule of taxation, except on property paying specific taxes, and taxes shall be levied on such property as shall be prescribed by law; provided, that the Legislature shall provide a uniform rule of taxation for such property as shall be assessed by a state board of assessors, and the rate of taxation on such property shall be the rate which the State board of assessors shall ascertain and determine is the average rate paid upon other property upon which ad valorem taxes are assessed for State, county, township, school, and municipal purposes.

"That section 13, of Article XIV, of said Constitution be amended so as to read as follows:

"SEC. 13. In the year one thousand nine hun-

dred and one, and every fifth year thereafter, and at such other times as the Legislature may direct, the Legislature shall provide for an equalization of assessments by a State board on all taxable property except that taxed under laws passed pursuant to section 10 of this article."

The amendments having been adopted at the November election, the Governor called another special session, to begin Dec. 12, in order to carry them into effect by appropriate legislation, giving as a reason for a special session that the existing Legislature, being thoroughly familiar with the subject, could deal with it much more expeditiously than the new Legislature at the regular session.

Invalid Laws.—In October the Supreme Court declared the sugar-bounty law, granting manufacturers one cent a pound from the State treasury, to be unconstitutional.

A section of the tax law was declared unconstitutional. It was designed to act as a statute of limitation and to bar owners of property from disputing in any way the validity of a tax sale under which their property had been sold, unless question was raised within six months after service of notice of purchase. The decision is on the ground that there are provisions in section 143 that are not only beyond the natural limits of the title, but are directly antagonistic to its spirit.

A decision in the court of Kent County in a garnishee case holds that no public official can assign his salary before it is earned.

Fraudulent Transactions.—Discovery was made in 1899 that new military goods which had been bought to supply the troops for the Cuban war and had not been used had been sold by officials for \$10,500, and then bought back for about \$60,000. An investigation by the grand jury brought out the fact that on July 17, 1899, at a meeting of the Michigan Military Board, a resolution was adopted authorizing the sale of all military supplies, and in furtherance of this scheme four or five letters were sent to various parties offering all the tents and quartermaster general's supplies for sale. On July 19, a letter was received from Chicago, purporting to come from the Illinois Supply Company (per Edson C. Cobb, manager), offering \$10,500 for the goods without even having seen them. The offer was at once accepted, the goods were sent, and Cobb, without opening the cars or examining the goods, forwarded them to the Henderson-Ames Company, of Kalamazoo. At the same meeting of the board at which the resolution to sell supplies was adopted, another resolution was adopted, and in pursuance of this the board proceeded at once to buy of the Henderson-Ames Company, of Kalamazoo, goods almost identical with those which had been sold to the Illinois Supply Company. The gross amount purchased was more than \$60,000. Subsequently it was discovered that the Illinois Supply Company was a myth; no such company ever had been in existence; that Edson C. Cobb (manager of the company) was an employee of the Chicago Beach Hotel Company, at Chicago; and that he was closely related to at least one of the principal stockholders in the Henderson-Ames Manufacturing Company. The goods were followed through the hands of the cartage company at Kalamazoo, who acknowledged that within two weeks they began shipping the same supplies back from Kalamazoo to Lansing, where they were traced to the quartermaster general's department.

For connection with these frauds, indictments were found, in December and in January, 1900, against William L. White, Quartermaster General;

Howard A. Smith, Assistant Quartermaster; Arthur F. Marsh, Inspector General and chairman of the Republican State Central Committee; and Eli R. Sutton, Regent of the University of Michigan and member of Gov. Pingree's military staff.

The same grand jury brought indictments against other officials and others, namely: Edgar J. Adams, Speaker of the House of Representatives, two indictments for bribery; William A. French, State Land Commissioner, offering bribes; Charles Pratt, agent for a law-book concern, offering bribes; Representative D. Judson Hammond, of Pontiac, soliciting bribes; Frederick A. Maynard, ex-Attorney-General, misdemeanor in retaining portion of his chief clerk's salary.

The alleged bribery was in connection with an antitrust bill and a bill for purchases, from the State treasury, of the national system of reports of the courts of the several States for each county.

White and Marsh left the State when it was known that indictments would be out against them. Marsh soon returned, but White not until November, 1900, when a reward of \$1,000 was offered for his apprehension. Marsh was brought to trial March 20, and after a trial of fourteen days was convicted. His attorneys took steps for an appeal. Sutton's trial was in May and June, and he was acquitted. Smith, having testified in the Marsh and Sutton trials and incriminated himself, pleaded guilty when his case was called in October, and was sentenced to pay a fine of \$1,200 on or before Oct. 22, or be committed to the county jail for two years. When White returned he was tried, convicted, and sentenced to ten years in prison, where he was taken, Dec. 4. The next day Gov. Pingree pardoned him and Marsh, whose appeal was pending, making the condition that each should pay a fine of \$5,000 in five yearly installments to the treasurer of Ingham County; should he refuse to receive it, the money should then go into the State treasury. The State had been reimbursed by the Henderson-Ames Company, the bondsmen of White, and the accused themselves or their friends, for the amounts embezzled. The Governor gave among his reasons for the pardons that the company had not been prosecuted, and that the sentence of White was excessive, since the State had been paid. There is some question as to the validity of the conditions attached to the pardons.

An incident of the Marsh trial was the withdrawal of his counsel, when Judge Wiest refused a continuance, with the statement that there was no chance in his court for justice, or something to that effect. Judge Wiest decided that they were guilty of contempt, and fined the two lawyers \$250 and \$200 respectively. Near the close of the year he summoned Gov. Pingree to answer for contempt on account of criticisms made on his course in the trials in an interview with the Governor, published in a Detroit newspaper. He had previously asked the Governor to have his conduct investigated by the Legislature. The Governor refused to appear to answer for contempt, and the case was continued to January.

The Governor asked the resignation of the officers implicated early in the year, and appointed O'Brien J. Atkinson to succeed White, Ford Starring to succeed Smith, and F. W. Green to Marsh's place. He also asked the resignation of the Adjutant General, on the ground that he was guilty of negligence, but the Adjutant General refused to resign.

The State cases against the ex-Attorney-General, the Land Commissioner, the Speaker of the House, and others were put over to the January term of 1901.

Political.—The Republican convention for nominating presidential electors and choosing delegates to the national convention met in Detroit, May 3. The resolutions approved the administration of President McKinley, and instructed the delegates to vote for his renomination. The convention for nominating State officers was held at Grand Rapids, June 27 and 28. After reaffirming allegiance to the principles for which the party stands, the platform denounced trusts and combinations to control prices, expressed sympathy with the Boers, declared in favor of equal and uniform taxation, and said further:

"We favor the prompt repeal of all special railroad charters granting to any railroad in the State special privileges.

"We condemn the corruption of State officials that has brought shame and disgrace to the State, and we demand the vigorous prosecution of all who are guilty."

For the nomination for Governor there were six candidates—Aaron T. Bliss, Justus S. Stearns, D. M. Ferry, C. S. Osborn, James O'Donnell, and M. D. Campbell. Mr. Bliss was chosen on the nineteenth ballot. The remainder of the ticket was: For Lieutenant Governor, O. W. Robinson; Secretary of State, Fred M. Warner; State Treasurer, Daniel McCoy; Auditor General, Perry F. Powers; Commissioner of State Land Office, E. A. Wildey; Attorney-General, Horace M. Oren; Superintendent of Public Instruction, Delos Fall; Member of State Board of Education, J. H. Thompson.

The Democratic convention, May 1, chose delegates to Kansas City, who were instructed for Mr. Bryan. The nomination of C. A. Towne for Vice-President was recommended. The resolutions censured the administration for its colonial policy, saying:

"We believe this policy has been dictated to and forced upon the administration of President McKinley by the mercenary combinations known as trusts. The trust is supreme in political as in industrial activities. In both it is an unmixed public evil. The economic advantages of industrial combinations are entirely lost to the people and swell the profits of arrogant and conscienceless magnates, who feed on the vitals of their victims. We request our delegates to the national convention to urge upon that body the selection of the most practical and effective of the many plans for curtailing the powers of the trusts, and to pledge the party to specific legislation upon the lines adopted."

Further, they declared against a large standing army and in favor of just taxation and municipal ownership of public utilities, a national income tax, and direct election of United States Senators. They expressed sympathy for the South African republics, and condemned "the present Republican administration in this State as the most corrupt and scandalous in the history of this commonwealth."

The second convention was held in Detroit, July 25 and 26. The nominations were: For Governor, William C. Maybury; Lieutenant Governor, Jonathan G. Ramsdell; Secretary of State, John W. Ewing; State Treasurer, Charles F. Sundstrom; Commissioner of the State Land Office, George Winans; Auditor General, Hiram B. Hudson; Attorney-General, James O'Hara; Superintendent of Public Instruction, Stephen H. Langdon; Member of the State Board of Education, James McEntee.

The platform said in part:

"We denounce the last Legislature generally as the crowning infamy in the history of the Republican party in Michigan. We denounce it specific-

ally for its failure to submit to the people the constitutional amendments relative to taxation demanded by the State grange and farmers' clubs; for its failure to increase the specific tax on railroads; for its failure to pass the mining tax measure; for its failure to repeal the special railway charter; for its failure to pass the anticolor oleo law demanded by the State grange and dairymen of the State; for its refusal to submit to the people the constitutional amendment providing for the so-called 'initiative and referendum,' and for which submission every Democrat of both houses voted; for its refusal to pass the measure for the regulation of freight and switching charges."

At its convention, late in August, the Prohibition party made the following nominations: For Governor, Frederick S. Goodrich; Lieutenant Governor, Trowbridge Johns; Secretary of State, Reuben C. Reed; Treasurer, John F. Easley; Auditor General, William D. Farley; Attorney-General, Walter S. Westernman; Superintendent of Public Instruction, David S. Warner; Commissioner of State Land Office, Gideon Vivier; Member of Board of Public Instruction to fill vacancy, Samuel W. Bird.

The platform declared against any act legalizing the traffic in strong drink, and censured the present administration for "its shameless bargain and sale of public interests for private gain."

It censured the past Legislature for the attempt to pass a law allowing the sale or liquor upon a great national holiday. The sincerity of tax reformers was questioned as long as they are silent concerning the liquor traffic. It reindorsed woman suffrage and said there should be no application of public moneys for sectarian purposes, closing with an appeal to voters, especially those who follow Jesus and honor his Church, to unite with the party in killing the liquor traffic.

The People's party nominated D. Thompson for Governor; The Social Democrats, Henry Ramsey; and the Socialist-Labor Party, H. Uhlbricht.

The result of the presidential election was: McKinley, 316,269; Bryan, 211,685; Woolley, 11,859; Debs, 2,826; Barker, 833; Malloney, 903.

Republicans were elected to Congress in all the 12 districts.

For Governor, Bliss received 305,612 votes; Maybury, 226,228; Goodrich, 11,834; Ramsey, 2,709; Uhlbricht, 958; Thompson, 871.

The State Senate in 1901 will stand: Republicans 31, Democrats 1; the House, Republicans 90, Democrats 10.

The proposed amendment to the Constitution, permitting the enactment of laws for assessment and taxation of the property of railroad, telegraph, telephone, and express companies and certain other corporations, upon its cash value, instead of specific taxes upon earnings, was carried.

MINNESOTA. a Western State, admitted to the Union May 11, 1858; area, 83,365 square miles. The population, according to each decennial census since admission, was 172,023 in 1860; 439,706 in 1870; 780,773 in 1880; 1,301,826 in 1890; and 1,751,394 in 1900. Capital, St. Paul.

Government.—The following were the State officers in 1900: Governor, John Lind; Lieutenant Governor, Lyndon A. Smith; Secretary of State, Albert Berg; Auditor, Robert C. Dunn; Treasurer, August T. Koerner; Attorney-General, Wallace B. Douglas—all Republicans except the Governor, who was elected on a fusion ticket of Democrats and Populists; Commissioner of Insurance, J. A. O'Shaughnessy; Adjutant General, George C. Lambert; Chief Grain Inspector, A. C. Clausen, till August, when he resigned and was succeeded by Edward S. Reishus; Chief Justice

of the Supreme Court, Charles M. Start; Associate Justices, L. W. Collins, Calvin L. Brown, John A. Lovely, and Charles L. Lewis; Clerk, Darius F. Reese. All the justices are Republicans.

State officers are chosen in November of even years. The Legislature convenes in January of odd years, and the session is limited to ninety legislative days.

Population.—The population of the State, by counties, according to the census of 1900, was as follows: Aitkin, 8,743; Anoka, 11,313; Becker, 14,375; Beltrami, 11,030; Benton, 9,912; Big Stone, 8,731; Blue Earth, 32,263; Brown, 19,787; Carlton, 10,017; Carver, 17,544; Cass, 7,777; Chippewa, 12,499; Chicago, 13,248; Clay, 17,942; Cook, 810; Cottonwood, 12,069; Crow Wing, 14,250; Dakota, 21,733; Dodge, 13,340; Douglas, 17,064; Faribault, 22,055; Fillmore, 28,238; Freeborn, 21,838; Goodhue, 31,137; Grant, 8,935; Hennepin, 228,340; Houston, 15,400; Hubbard, 6,578; Isanti, 11,675; Itasca, 4,573; Jackson, 14,793; Kanabec, 4,614; Kandiyohi, 18,416; Kittson, 7,889; Lac qui Parle, 14,289; Lake, 4,654; Lesueur, 20,234; Lincoln, 8,966; Lyon, 14,591; McLeod, 19,595; Marshall, 15,698; Martin, 16,936; Meeker, 17,753; Mille Lacs, 8,066; Morrison, 22,891; Mower, 22,335; Murray, 11,911; Nicollet, 14,774; Nobles, 14,932; Norman, 15,045; Olmsted, 23,119; Ottertail, 45,375; Pine, 11,546; Pipestone, 9,264; Polk, 35,429; Pope, 12,577; Ramsey, 170,554; Red Lake, 12,195; Redwood, 17,261; Renville, 23,693; Rice, 26,080; Rock, 9,668; Roseau, 6,994; St. Louis, 82,932; Scott, 15,147; Sherburne, 7,281; Sibley, 16,862; Stearns, 44,464; Steele, 16,524; Stevens, 8,721; Swift, 13,503; Todd, 22,214; Traverse, 7,573; Wabasha, 18,924; Wadena, 7,921; Waseca, 14,760; Washington, 27,808; Watonwan, 11,490; Wilkin, 8,080; Winona, 33,686; Wright, 29,157; Yellow Medicine, 14,602; White Earth Indian reservation, 3,486.

Finances.—For the year ended July 31, 1900, the receipts of the State treasury were \$9,015,108.24, and the disbursements \$6,845,830.72, leaving a balance of \$2,169,337.52. The State debt was \$1,279,000, having been reduced \$70,000 in the year and \$380,000 since Jan. 1, 1897. The permanent school and university funds were, respectively, \$6,776,767.27 and \$925,300.

The principal classifications of the State treasury receipts for the year were: Revenue fund, \$3,640,061.15; permanent school fund, \$1,186,198.71; general school fund, \$1,258,446.75. Disbursements: Revenue fund, \$3,582,976.93; permanent school fund, \$1,090,455.57; general school fund, \$1,306,352.19; general university fund, \$383,054.99. The amount of railroad taxes paid was \$1,443,992.13. The principal receipts from taxation of insurance companies were: Domestic fire, \$62,819.17; foreign fire, \$31,127.64; life, \$70,389.85; stock, casualty, fidelity, and title, \$11,357.59.

Charities and Corrections.—The number of inmates of the three hospitals for the insane was 3,364. Two additional hospitals are being built, and the estimated number of inmates in all five hospitals at the close of the next biennial period is 4,100.

The population of the State Training School was 383; of the State Soldiers' Home, 289; School for the Deaf, 173; School for the Blind, 59; School for the Feeble-minded, 668; State Public School, 236; State Reformatory, 153; State Prison, 508. The year's expenses of the 13 charitable and penal institutions were \$969,337, or \$187.20 per capita, and the estimates for the following year were \$1,066,336. The State Prison has one of the largest binder-twine manufacturing plants in the United States, whose capacity was increased in 1900 to 8,000,000 pounds per annum.

Lands.—The most notable event of the year in relation to the State's lands was the termination of the long-standing litigation over the validity of the swamp-land grant to the Duluth and Iron Range Railroad Company. The amount involved was 606,720 acres.

The State had denied the validity of this grant, but was finally beaten by a decision of the United States Circuit Court of Appeals in favor of the railroad. In November a great sale of timber stumpage was held, at which nearly 90,000,000 feet of pine were disposed of at an average price of \$5.57 a thousand feet. The following shows the conditions of various public funds, derived from the sale of State lands, July 31, 1900: Permanent school fund, \$12,546,529.30; permanent university fund, \$1,286,817.13; internal improvements fund, \$2,754,184.57. The first two funds are invested mostly in Massachusetts, Alabama, and other State bonds.



S. R. VAN SANT,
GOVERNOR OF MINNESOTA.

Products.—There were in the State 582 creameries and 60 cheese factories. The creameries were supplied with milk from 331,512 cows, producing 972,799,299 pounds of milk in the year. The butter manufactured therefrom was 44,007,933 pounds. Of this there was shipped out of the State 36,750,375 pounds. The amount paid to patrons was \$6,959,914.55. The operating expenses were \$930,739.95. The total number of creamery patrons in the State is 40,189. The amount of milk received by the different cheese factories was 29,998,924 pounds. The amount of green cheese made was 3,076,812 pounds; amount paid to patrons for milk, \$217,192.20; total amount of cured cheese sold, 2,970,190 pounds; total number of patrons, 1,226.

Minnesota is the greatest wheat producer of the Union; but in 1900 the crop was considerably under the average yield, being about 65,000,000 bushels. The State, which with one exception produces the most iron of any, turned out 8,000,000 tons of iron ore in 1900.

Educational.—There were in the State 7,303 schoolhouses, of the value of \$4,405,095, with 399,207 pupils. The male and female teachers numbered 2,052 and 8,534, respectively. The average monthly pay of the former was \$47.84, and of the latter \$35.24. The cash on hand and receipts aggregated \$7,447,504.70; disbursements, \$6,054,588.99; cash on hand at close of year, \$1,602,903.23; aggregate indebtedness of school districts, \$4,586,204.31. There were 2,539 public school libraries with over 300,000 volumes. The enrollment in the four normal schools was 2,376, and the graduates numbered 379.

In the University of Minnesota there were 3,236 students, including 907 women. With one exception it has the largest enrollment of any university in the United States. The students of 1900 were thus divided among the different departments: Graduate students, 124 men and 53 women; College of Science, Literature, and Arts, 416 men and 520 women; College of Engineering

and Mechanic Arts, 197 men and 12 women; School of Mines, 77 men; School of Chemistry, 5 men; Department of Agriculture, 423 men and 80 women; College of Law, 520 men and 8 women; Department of Medicine, 524 men and 32 women; University Section of Summer School, 127 men and 262 women.

There are 28 buildings, and the professors and instructors number 245. The library contains 75,000 volumes. The annual resources for current expenses are \$330,000; invested funds, \$1,250,000; value of land, buildings, and equipments, \$1,400,000. Tuition is free to all except in law and medicine, and coeducation has existed from the start, in 1869.

Labor.—The work of the State Bureau of Labor revealed both improvement of method and increased beneficence of result. It inspected 3,338 factories and other industrial establishments, covering 83,237 employees—70,951 men, 11,517 women, 565 boys, and 204 girls. These represented 69 separate industries. The enforcement of the law regulating child labor was more thorough than ever.

Direct Primaries.—Perhaps the most notable event of organic political importance in Minnesota was the first test of the direct primary election law in Minneapolis, to which city the Legislature had restricted the operation of the law after unsuccessful attempts to include St. Paul and Duluth. Under this law, all nominations for elective officers are made at primaries, under the Australian ballot law, instead of at party conventions. The results of this first practical test of the statute appeared to justify the contention of its author (Oscar F. G. Day) and champions that it would be instrumental in weeding out the objectionable element among office seekers and placing a better class of men in public station. Some of these results were surprising, but wholesome. Officeholders who had long thrived at the public "crib" by reason of their skill in manipulating conventions were hopelessly defeated, as were others most eager for nomination; while many good citizens who for years had held aloof from public affairs were now placed in nomination by large majorities and triumphantly elected in November. So delighted were the people with the outcome of this significant reform experiment that a determined movement was at once begun to extend the direct primary election law over the entire State; and the Minneapolis object lesson, furthermore, strengthened the hands of those who are laboring for the enactment of a similar law in other States.

Political.—The Republican State Convention was held in St. Paul, Sept. 5. The following ticket was nominated: For Governor, Samuel R. Van Sant; Lieutenant Governor, Lyndon A. Smith, Secretary of State, Peter E. Hanson; Treasurer, Julius H. Block; Attorney-General, Wallace B. Douglas; Chief Justice of the Supreme Court, Charles M. Start; Associate Justice, Loren W. Collins; Railroad and Warehouse Commissioners—four years, Ira B. Mills, Joseph G. Miller; two years, Charles F. Staples. The platform favored an amendment to the Federal Constitution to regulate trusts and prohibit monopolies; denounced the illegal manufacture and sale of oleomargarine; favored the election of United States Senators by direct vote of the people; declared for fair and equal taxation; and commended the gross earnings system of taxation of railroads.

The Democratic State Convention, held in St. Paul, Sept. 5, nominated this State ticket: For Governor, John Lind; Lieutenant Governor, Thomas J. Meighen; Secretary of State, Michael E. Neary; Treasurer, H. C. Koerner; Attorney-Gen-

eral, R. C. Saunders; (candidates for the Supreme Court the same that were on the Republican ticket); Railroad and Warehouse Commissioners—four years, P. M. Ringdal, T. J. Knox; two years, S. M. Owen. The platform expressed the belief that "the Constitution follows the flag," and therefore denounced the Porto Rican tariff bill; extended sympathy to the Boers; condemned the Dingley protective tariff law; condemned trusts; favored the endeavor to reduce the number of hours of a legal working day; accused the Republicans of gerrymandering the legislative districts; favored tax reform; and demanded that the gross earnings tax of railroads be increased to 4 per cent.

The People's party convention was held in Minneapolis Sept. 5. The Democratic State ticket was accepted through fusion. The platform was largely an argument for free silver. It also favored a graduated income and inheritance tax, postal savings banks, and Government ownership of railroads; condemned trusts, and as a means to kill them off asked for direct legislation giving the people the lawmaking and veto power under the initiative and referendum; denounced the Government's efforts to suppress the Philippine rebellion; extended sympathy to the Boers; called for repression of illegal importation of foreign laborers; advocated municipal ownership of public utilities; denounced the issuing of injunctions in disputes between labor and capital; favored election of United States Senators by popular vote; called for "a full, free, and fair ballot and an honest count" in all the States; favored home rule in the Territories and their early admission to statehood; and denounced the management of the Pension Bureau.

The following partial State tickets were also placed in the field:

Middle-of-the-Road Populist: For Governor, Sylvester M. Fairchild; Lieutenant Governor, Erick G. Wallinder; Treasurer, Stephen W. Powell; Railroad and Warehouse Commissioners—four years, M. R. Parks, M. P. Moran; two years, John J. Hibbard.

Prohibition: For Governor, Berndt B. Haugan; Lieutenant Governor, C. B. Wilkinson; Secretary of State, Frank W. Carlisle; Treasurer, Charles W. Dorsett.

Social-Democrat: For Governor, Thomas H. Lucas.

Social-Labor: For Governor, Edward Kriz.

All the above-named parties nominated presidential electors.

The entire Republican State ticket was elected by pluralities ranging from 2,254 for Governor to 56,645 for Attorney-General. The vote for presidential electors stood: McKinley (Republican), 190,461; Bryan (Democrat), 112,901; Woolley (Prohibition), 8,555; Debs (Social-Democrat), 3,065.

A proposition to amend the Constitution so as to provide for loaning the permanent school and university funds to, or the purchase of bonds of cities, villages, towns, counties, and school districts was defeated.

MISSIONS, FOREIGN, ECUMENICAL CONFERENCE ON. The Ecumenical Conference on Foreign Missions which assembled in the city of New York in April, 1900, was the third meeting of the kind that has been held. The first conference, which was small in numbers and was chiefly composed of returned missionaries, met in London in 1878; the second was held in London in 1888, when the one hundredth year of the institution of the missionary movement was celebrated, and was attended by 1,759 delegates. In prepara-

The conference was in session during ten days, including Sunday, from April 21 to May 1. The Hon. Benjamin Harrison, ex-President of the United States, was honorary president of the body, while special presiding officers were appointed for each day's sessions. The principal meetings were held in Carnegie Hall and the Central Presbyterian Church, and "overflow meetings" and sectional meetings were held in addition. At the opening meeting, April 21, for welcoming the delegates, ex-President Harrison, presiding, made the opening address; the Rev. Dr. Judson Smith, chairman of the managing committee, delivered the address of welcome; and the Rev. Dr. Wardlaw Thompson, secretary of the London Missionary Society; the Rev. Dr. A. Schreiber, of Germany; the Rev. Dr. A. Chamberlain, missionary in India; and the Rev. Dr. Joseph King, of Australia, responded. In the evening of the same day (April 21) a meeting for national welcome was held, when addresses of welcome were made by William McKinley, President of the United States, and Theodore Roosevelt, Governor of the State of New York, and the response on behalf of the conference by ex-President Harrison. The meetings of Monday, April 23, were devoted chiefly to the general survey of the progress and present condition of missions. A Century of Missions was made the subject of a review of the growth of missionary enterprise by Mr. Eugene Stock, editorial secretary of the Church Missionary Society. A report upon centennial statistics was presented by the Rev. Dr. James S. Dennis, from which the following figures are derived: Number of societies directly engaged in conducting foreign missions, 249, distributed as follows—in the United States, 49; in England, 42; in Asia, 29; in Africa, 28; in Australia and Oceania, 26; in Germany, 15; in the Netherlands, 10; in Canada, 8; in Sweden, 7; in the West Indies, 11; in Scotland, 7; in Ireland,

4; in Norway, 4; in Denmark, 3; in France, 2; in Switzerland, 2; in Wales, 1; in Finland, 1; total income, \$17,161,092, of which \$6,843,031 are credited to English societies, \$5,403,048 to those of the United States, \$1,430,151 to German, and \$1,280,684 to Scottish societies; whole number of missionaries, including ordained ministers, ordained physicians, lay missionaries, married women not physicians, and unmarried women not physicians, 13,607, of whom 5,136 are from England, 4,110 from the United States, 1,515 from Germany, 653 from Scotland, etc.; number of native agents, 77,338; of communicants, 1,317,684, of whom 84,186 were added in 1899; of native Christian adherents, 4,414,236. The total amount of native contributions was \$1,841,757. The educational work of the missions included 20,374 schools of all grades, with 1,046,309 pupils. These schools comprised 93 foreign missionary universities, having 35,414 students; 358 theological and training schools, with 11,905 students; 857 boarding and high schools, with 83,148 pupils; 134 industrial training institutions and classes, with 6,309 students; 63 medical and nurses' schools and classes, with 589 students; 127 kindergartens, with 4,502 pupils; and 18,742 elementary or village schools, containing 904,442 pupils, 267,720 of whom were girls. The Bible has been translated into 421 languages and dialects, and the various agencies engaged in the distribution of Bibles, tracts, etc., returned an aggregate annual circulation of 14,494,098 copies. One hundred and forty-eight mission publishing houses and printing presses returned an annual aggregate issue of 10,561,777 copies of their publications, and 366 magazines and papers in foreign mission lands circulated 297,435 copies. Three hundred and fifty-five hospitals and 753 dispensaries were sustained, at which 93,705 in-patients and 2,579,651 out-patients were treated; besides 90 leper hospitals and asylums and homes for the untainted children, with 5,166 leper inmates. The Woman's Christian Temperance Union had affiliated national branches in 26 foreign mission countries. The Anglo-Indian Temperance Association in India had 281 affiliated temperance societies. Other elements of the missionary force were 87 missionary training institutions in Christian lands, not including theological seminaries, and 67 mission steamers and ships, which were used in evangelistic, medical, and other departments of mission service in the foreign field.

Besides the 249 missionary societies actively engaged, 200 other societies indirectly co-operating or aiding in foreign missions or engaged in specialized efforts, and 68 women's auxiliaries, were mentioned, the income of which would swell the total of income for missions to \$19,126,120. Fifty-four native organizations for extension of knowledge and the furtherance of national, social, moral, and religious reform were said to be affiliated to missions, and most of them due to missions.

From 1649 to 1800 12 missionary societies, and from 1800 to 1830 22 societies, were formed. The subsequent record of new societies, by decades, is: 1830-'40, 16 societies organized; 1840-'50, 25; 1850-'60, 34; 1860-'70, 41; 1870-'80, 57; 1880-'90, 92; 1890-1900, 100. The year in which the largest number of societies were formed was 1890, when 22 societies were organized; the next year in the record was 1896, with 11 new societies.

Nine sectional meetings were held in the afternoon of April 23, at which special surveys were presented of the several mission fields, including those in Japan, Korea, China, Assam, Burmah, Siam, India, Ceylon, Oceania, Mohammedan lands, Africa, North and South America, and "Hebrews in all lands."

Besides these exercises the sessions of the conference were devoted to the discussion, in prepared papers and addresses and volunteered remarks, of the numerous aspects of a large list of subjects relating to topics which might be referred to the following principal heads: Authority and purpose in mission work; evangelistic work; woman's work—evangelistic, educational, etc.; native agency in evangelistic work; the missionary staff; literature; the study of missions; medical work; work for young women and children; value of foreign missions as an educational agency in training young people; administrative problems of the mission; Bible translation and distribution; educational work; wider relations of missions (in the fields of discovery, geography, commerce, colonization, philology, science, philosophy, etc.); the native church and moral questions; medical training of natives; vernacular literature; normal training; missions and governments; woman's work in foreign missions; comity and division of fields; co-operation and division of fields in occupied and unoccupied territory; higher education in mission fields; mission presses; self-support by mission churches; principles and methods in the evangelistic church; educational and medical work; missionary boards and societies; elementary schools; industrial training; the training of missionaries; students and other young people—their achievements; the volunteer student movement; non-Christian religions; organized movements among the young people of the Church; responsibility of the Church in the light of the working of God's Spirit among the students and other young people; apologetic problems in missions; relation of medical work to missionary work as a whole; hospitals and dispensaries; educational philanthropic work; literary work; missionary literature for home churches; relation of missions to social progress and peace; home work for foreign missions; support of missions by home churches; outlook and demands (the present situation—its claims and opportunities, outlook and demands for the coming century).

A private conference of officers of the several boards, missionaries, and delegates interested in the matter was held, May 1, to consider the best means of preserving the results of the Ecumenical Conference. A resolution was passed, declaring it to be the sense of the meeting that committees should be requested to consider the question of appointing an international committee, who, by correspondence or by conference or by both, shall deal with co-operative work in missions, and make known the result of their deliberations to the societies represented in the conference.

International Missionary Union.—The seventeenth annual meeting of the International Missionary Union, held at Clifton Springs, N. Y., was attended by 85 returned missionaries, representing 17 societies and 18 mission fields. The proceedings were similar in character to those of the Ecumenical Conference of Missions, which were often referred to. Members spoke of the conditions of their fields; and the topics discussed were classified under such heads as missionary apologetics, or evidences afforded by the mission fields of the supernatural character of Christianity; the influence of missions on the trend of governments, international comity diplomacy, etc.; education; medical missions; native churches; missionary comity and co-operation; and woman's work.

MISSISSIPPI, a Southern State, admitted to the Union Dec. 10, 1817; area, 46,810 square miles. The population, according to each decennial census since admission, was 75,448 in 1820, 136,621

in 1830; 375,651 in 1840; 606,526 in 1850; 791,305 in 1860; 827,922 in 1870; 1,131,597 in 1880; 1,289,600 in 1890; and 1,551,270 in 1900. Capital, Jackson.

Government.—The following were the State officers in 1900: Governor, A. H. Longino; Lieutenant Governor, J. T. Harrison; Secretary of State, J. L. Power; Treasurer, J. R. Stowers; Auditor, W. Q. Cole; Attorney-General, Monroe McClurg; Revenue Agent, Wirt Adams; Land Commissioner, E. H. Nall; Adjutant General, William Henry; Superintendent of Education, H. L. Whitfield; Railroad Commissioners, J. D. McInnis, A. Q. May, J. C. Kincannon; Chief Justice of the Supreme Court, Thomas H. Woods till April 1, when, his resignation taking effect, his place on the bench was filled by the appointment of S. S. Calhoun, who was reappointed, at the expiration of the term, May 10, to serve for the following term; Justice Albert H. Whitfield became Chief Justice and S. H. Terral and S. S. Calhoun Associate Justices; Clerk, Edward W. Brown—all Democrats.

The term of the State officers is four years; they are chosen in November of the years next preceding those of the presidential elections. The Legislature meets biennially the first Tuesday after the first Monday of January in even-numbered years.

Population.—The census shows that the increase in population in the past decade has been 20.2 per cent. The figures by counties are as follows: Adams, 30,011; Alcorn, 14,987; Amite, 20,708; Attala, 26,248; Benton, 10,510; Bolivar, 35,427; Calhoun, 16,512; Carroll, 22,116; Chickasaw, 19,892; Choctaw, 13,036; Claiborne, 20,787; Clarke, 17,741; Clay, 19,563; Coahoma, 26,293; Copiah, 34,395; Covington, 13,076; De Soto, 24,751; Franklin, 13,678; Greene, 6,795; Grenada, 14,112; Hancock, 11,886; Harrison, 21,002; Hinds, 52,577; Holmes, 36,828; Issaquena, 10,400; Itawamba, 13,544; Jackson, 16,513; Jasper, 15,394; Jefferson, 21,292; Jones, 17,846; Kemper, 20,492; Lafayette, 22,211; Lauderdale, 38,150; Lawrence, 15,103; Leake, 17,360; Lee, 21,956; Leflore, 23,834; Lincoln, 21,552; Lowndes, 29,095; Madison, 32,493; Marion, 13,501; Marshall, 27,674; Monroe, 31,216; Montgomery, 16,536; Neshoba, 12,726; Newton, 19,708; Noxubee, 23,846; Oktibbeha, 20,283; Panola, 29,027; Pearl River, 6,697; Perry, 14,682; Pike, 27,545; Pontotoc, 18,274; Prentiss, 15,788; Quitman, 5,435; Rankin, 20,955; Scott, 14,316; Sharkey, 12,178; Simpson, 12,800; Smith, 13,055; Sunflower, 15,084; Tallahatchie, 19,600; Tate, 20,618; Tippah, 12,983; Tishomingo, 10,124; Tunica, 16,479; Union, 16,522; Warren, 40,912; Washington, 49,216; Wayne, 12,539; Webster, 13,619; Wilkinson, 21,453; Winston, 14,124; Yalabusha, 19,742; Yazoo, 43,948.

Vicksburg has 14,824 inhabitants; Meridian, 14,050; Natchez, 12,210; Jackson, 7,816; Greenville, 7,642; Columbus, 6,484; Biloxi, 5,467; McComb, 4,477; Laurel, 4,193; Holly Springs, 4,185; Hattiesburg, 4,175; Water Valley, 3,813; Corinth, 3,661; Aberdeen, 3,439; Canton, 3,404; Wesson, 3,279; Yazoo, 3,194; West Point, 3,193; Greenwood, 3,026. The figures are as given in a local newspaper. In another list Greenwood, Holly Springs, and Laurel are given a smaller number and Yazoo a larger.

Finances.—The amount of receipts from all sources during the fiscal year ending Sept. 30, 1900, was \$1,916,491.70, which amount, increased by \$333,765.80 cash in the treasury Oct. 1, 1899, shows the available cash to have been \$2,250,257.50, against which the Auditor's pay warrants to the amount of \$1,627,825.57 and special warrants to the amount of \$30 were paid, leaving a cash balance on hand at the end of the year of \$622,401.93.

The payable debt of the State amounts to \$1,018,429.52, of which \$8,029.80 was in outstanding warrants, \$929.22 railroad tax distribution, \$2,449.90 certificates of indebtedness, and the remainder bonds and unpaid interest on them. The amount of the nonpayable debt is \$1,884,658.89; it is in school and college trust funds. The total State debt is \$2,903,088.41.

The receipts from the Penitentiary were \$219,416.27, including \$35,027.23 balance at the beginning of the year; and the disbursements were \$117,310.05, leaving a balance of \$102,106.22.

The total assessed valuation of property in the State is \$188,716,159; of this, \$57,400,336 is personalty. The increase in the total is \$27,490,038. The largest increase has been made in the piney woods section. The number of polls assessed is 294,515. The amount collected on poll taxes for the year was \$280,074.12. The tax is two dollars, and its payment is a prerequisite for voting, so that about half the population otherwise qualified to vote are disfranchised from this cause alone.

The figures of valuation given above do not include the assessments of railroad, telegraph, express, and sleeping-car property, which are made by the Railroad Commission.

The revenue from saloons, of which there were 146, was for a year \$131,100. There are now 13 counties only that license the business.

The amount of capital invested in manufacturing enterprises is \$4,295,164; in merchandise, \$15,104,641. The value of cattle is given as \$2,167,685; of horses, \$7,251,975; of mules, \$8,208,711. The amount of money going to make up the assessment of personalty is \$7,847,747.

Education.—According to the apportionment of school money made in December for the half year, the 590,222 children in the country districts will receive \$595,758.88 and the 62,777 children in the separate school districts, \$70,907.68. The Legislature appropriated \$1,000,000 for the schools this year—a larger amount than ever before.

The school children have chosen the magnolia, by vote, as the State flower.

The report of the summer normals and institutes says that at least 75 per cent. of the white teachers of the State have attended either the normals or the institutes. At least one third of the white teachers were enrolled in the various normals.

The fund used to defray the expenses of the summer work was composed of a State appropriation of \$3,500, a Peabody apportionment of the same amount, local subscriptions amounting to \$1,650, and the institute fund, which is made up from the examination fees collected from teachers.

The attendance at the colored normals and institutes was no more than is usual, because this has been a year of unprecedented rains.

The Normal School, at Holly Springs, receives \$2,000 each year for maintenance, and \$250 additional for repairs, fuel, and insurance.

The Agricultural and Mechanical College has about 400 students. It receives a maintenance fund of \$25,719, besides special sums for improvements. A textile school is to be established in connection with the college at a cost of \$40,000, and a branch experiment station in the southern part of the State in the piney woods section, on a tract of not less than 200 acres.

Alcorn Agricultural and Mechanical College, for colored students, receives an annual support fund of \$8,000, besides the income from the land received from the Government. The trustees have decided to establish a department for colored girls.

The Industrial Institute and College for Girls, at Columbus, is to have new dormitory and infirmary buildings, provided for by the Legislature.

Mississippi College graduated 8 men in June; 241 were enrolled. Millsaps College conferred degrees on about 30, 16 of whom were from the law class. The University of Oxford conferred the degree of LL. B. on 24 students, A. B. on 9, B. S. on 4; and 5 received that of bachelor of philosophy.

Charities and Corrections.—The number of inmates in the State charitable institutions is about as follows: Hospital for the insane, Jackson, 600; hospital for the insane, Meridian, 354; school for the blind, 44; school for the deaf, 109.

The Legislature appropriated the following sums for maintenance: State Insane Hospital, \$97,460, and \$2,500 for superintendent's salary; East Mississippi Insane Hospital, \$48,000 and \$2,000 salary; Deaf and Dumb Institute, \$18,450, besides salary of superintendent; School for the Blind, \$9,818; State Charity Hospital at Vicksburg, \$12,000, on condition that the city and county give in addition one third that amount.

The Legislature gave \$4,000 to build an annex for colored children to the School for the Blind; but the trustees, finding the sum too small, decided to turn it back into the State treasury, and ask the next Legislature for a sufficient amount.

The Board of Control, which is composed of the Governor, the Attorney-General, and the 3 members of the Railroad Commission, bought land for the new convict farm in December—about 13,000 acres in Sunflower County, at \$5.74 an acre for 11,000 acres, and \$6 for the remainder. The appropriation was \$80,000. The receipts from the Penitentiary for the fiscal year were greater by \$97,627 than those of the year preceding.

Railroads.—The total valuation of the railroads, express, telegraph, and palace car companies operating in the State, according to the report of the Railroad Commission published in March, is \$26,338,476, on which the tax assessed amounts to \$171,200.35, being an increase in valuation over 1898 of \$1,901,290 and an increase of taxes collected of \$12,359.14. The privilege taxes for 1899 amount to \$40,862.22, against \$40,582.90 for 1898, an increase of \$279.32. The figures for 1900, published in July, show a still further increase in value.

The commission ordered a new mileage tariff on cotton seed, to take effect Oct. 1.

The Gulf and Ship Island road was finished to the coast this year, and the first passenger train was run about Aug. 28. The road runs from Jackson to Gulfport through Hattiesburg.

Banks.—From a tabulation prepared by the Auditor it appears that there were 107 State banks on Oct. 1, against 92 banks on Oct. 1 of the previous year. The majority of the new banks are in the southern part of the State and the delta. The loans and discounts on personal indorsements, real estate, and collateral securities were \$13,227,954.61, an increase of \$2,917,817.77 over those of last year.

The stocks, bonds, and warrants, classed as resources, amount to \$1,019,268.55, an increase of \$125,293.17.

The expenses and taxes are stated at \$231,860.16, an increase of \$25,330.45 from last year's figures.

Other items of resources are named to form a total of \$20,782,962.11, an increase of \$3,492,885.73 over that of last year.

The tabulation of liabilities states the capital paid in at \$4,483,096.64, an increase of \$646,584.64 from that of 1899. The surplus this year is \$578,544.35, an increase of \$35,136.47. The undivided profits are \$1,133,045.55, an increase of \$456,579.69. The individual deposits subject to check are \$10,412,325.07, an increase of \$1,217,924.10. The bills payable are \$1,927,019.22, an increase of \$462,209.57.

There are no savings banks, but several banks have savings departments. There are 12 national banks. The branch bank law is found to be ineffective, since it does not provide for separate statements of the property of the branch banks.

Levees.—The board of commissioners for the Yazoo-Mississippi Delta reported for the year ending Dec. 1 that the volume of work had been extensive. The disbursements from Jan. 1 to Dec. 1 were \$601,045.30, which was for contracts, engineering, salaries, interest on bonds, etc. When existing contracts are finished the board will have 120 miles of levees. The levee board has been in existence since 1882, and in his financial statement the president shows that since that time it has issued bonds amounting to \$1,850,000; of this amount, \$773,000 have been retired.

The Brandywine Rock Wall.—A subscription has been started for a fund to be used in an investigation of this mysterious wall in Claiborne and Copiah Counties. The character of the rock, which is thought by some to be artificial, is under examination. It is conjectured that a city was once inclosed by it.

Cotton.—The cotton crop was smaller this year than in other recent years. It is given as 1,230,000 bales. Ten mills were reported as having been in operation, and 7 more were building. There were 2,427 looms and 81,890 spindles. The colored people are raising funds for a cotton factory in Jackson, and it was understood that \$50,000 had been subscribed by the end of the year.

The New Capitol.—The Legislature provided for the immediate building of the Statehouse. It is to be on the Penitentiary site, the prison buildings having been moved to the convict farms. The plans of Theodore C. Link, of St. Louis, were chosen for the building, and the contract was let in December to a Chicago firm, W. A. & A. E. Wells. Their bid was \$831,743, and the time set for completing the work twenty-eight months.

Lawlessness.—The Governor recommended a law to suppress lynching in the State, but a bill with that object failed to pass. There were several lynchings in the year. In March a negro accused of murder was hanged by a mob near Greenville. In June two negroes suspected of murdering a young girl at Biloxi were taken from jail at Mississippi City and hanged, because it seemed certain that one of them must be guilty. One had been taken out a few days before and tortured to make him confess, which he refused to do. In March a negro was shot to death by men of his own race, because of an assault upon a little girl. Another who had murdered his wife was taken from officers near Vicksburg, Oct. 22, and shot to death by a crowd of negroes. Aug. 13, a negro was taken from jail at Corinth and hanged in the public square, for assault upon a little girl. A lynching took place at Gloster, April 13, said to have been without even a pretext of justification, and 12 white men were brought to trial for it in May; but the result of the trial has not come under notice. A negro who shot a marshal at Gulfport was lynched near that place in December. A feud in Winston County was reported to have resulted in the death of 12 men; but a newspaper in that county deplored the sensational reports regarding the feud and said that as a matter of fact the killing of only 7, 5 whites and 2 negroes, could be traced directly to it.

Legislative Session.—The regular biennial session of the Legislature began Jan. 2 and ended March 12. John R. Dinmore was President *pro tem.* of the Senate, and A. J. Russell was Speaker of the House.

Gov. Longino was inaugurated Jan. 16. In his

address he emphasized the necessity of action on the Statehouse question, the need of a textile school, of a general primary election law, and of another convict farm, considered the subject of the suppression of mob violence, and expressed disapproval of the proposition to divide the school money between white and colored schools according to the proportion of school taxes paid by each race.

Two United States Senators were to be chosen, one to fill out the unexpired term of the late Senator Walthall, and the other to succeed him at the end of the term in 1901. Anselm J. McLaurin was the unanimous choice of the caucus for the long term, and was elected. For the short term two candidates were before the caucus, ex-Gov. Robert Lowry and William V. Sullivan, who had been appointed to fill the place in the interval before the meeting of the Legislature. Mr. Sullivan was nominated by a vote of 88 to 72, and was elected.

Laws to the number of 198 were made, and 9 resolutions were passed.

The antitrust law was revised.

An important bill provides for elections to fill vacancies in offices where they have heretofore been filled by appointment of the Governor. Officials are to be elected where the unexpired term is longer than a year, if it is a district office; or fifteen months if it is a State office.

Corporations, associations, and individuals are authorized to exercise eminent domain in construction of canals, ditches, tramways, and pole roads for private transportation. Another act allows public roads to be worked by contract.

A Statehouse commission was created, to consist of the Governor, the Attorney-General, and three other members, one appointed by the Governor, one by the Senate, and one by the House; and an issue of \$1,000,000 of bonds was authorized for the purpose.

A military board was established, to be composed of the Adjutant General, Judge-Advocate General, and the commanding officers of the regiments of the National Guard; they are to make the order and instruction of the militia conform as nearly as practicable to those of the United States army.

The Governor is to appoint a commission to locate the positions of the State troops in the defense of Vicksburg in 1863, and recommended legislation. An appropriation of \$20,000 was made for a monument at Chickamauga Park.

Acts were passed regulating reinsurance and reports of companies, and requiring foreign fire and marine insurance companies to transact their business in the State through licensed resident agents; exempting mutual assessment insurance companies from taxation; and allowing mutual benefit societies to do business without complying with the law in regard to foreign companies.

The laws on taxation were amended in some particulars: Canning factories, steam laundries, money-lending establishments, oil depots, round-bale presses, and land timber mills are to be taxed; branch banks must be taxed in their own districts, and the amount of capital there assessed must be deducted from the assessment of the main bank. Names of persons delinquent on poll taxes are to be published.

Acts were passed to secure better enforcement of the liquor license laws. Supervisors were authorized to drain overflowed lands and pay by tax on them at ten cents an acre.

New business enterprises established before 1910 are to be exempt from taxation five years.

A branch experiment station is to be established by the board of the Agricultural College where

land is given for the purpose. It is to be in what is known as the "piney woods" region, south of the tier of counties on the line of the Alabama and Vicksburg Railroad.

An appropriation of \$40,000 was made for a textile school at the Agricultural College.

A historical commission was created, to consist of five members appointed by the President of the State Historical Society. Its duty is to make a full, detailed, and exhaustive examination of all sources and materials, documentary and record manuscripts, of the history of Mississippi from the earliest times, whether in this State or elsewhere, and to include therein the records of Mississippi troops in all wars in which they have participated, and also of the location and present condition of battlefields, historic houses and buildings, and other places of historic interest and importance in the State.

The names of the institutions for the insane were changed. The one that has gone under the name Lunatic Hospital will be known as the State Insane Hospital, and the other as the East Mississippi Insane Hospital, instead of asylum. The Board of Control was directed to buy an artesian well-boring outfit for use at State institutions. Provision was made for an additional farm or farms for the Penitentiary of 8,000 to 15,000 acres.

The law on sale of public lands was amended so that when the title has failed the patentee may receive from the State the return of the purchase money, fees, and interest; and if the land has yielded no profit, he may receive also the taxes paid, with interest.

The classification of municipal corporations was changed: Cities, 2,000 inhabitants; towns, 300 (instead of 500) to 2,000; villages, 100 to 300.

An act to raise revenue provides for making valid all contracts made previous to the passage of this act and subsequent to Jan. 1, 1895, which are or were null and void or voidable under previous or existing laws because of nonpayment of privilege taxes due when such contracts were made, upon terms of full payment of all such privilege taxes so in default with 200 per cent. damages thereon within sixty days from the passage of the act.

Among other enactments of the session were:

Regulating the sale and giving of cocaine.

Exempting Confederate soldiers who are infirm or over sixty years of age from the operation of the act imposing privilege taxes on certain industries, except those on the selling of liquor, deadly weapons, pool tables, and some others.

Defining the concealment of a lien in case of sale as false pretense.

Authorizing boards of supervisors to compel vaccination; also to pay for isolation and disinfection in cases of contagious and infectious diseases.

Fixing the number of pounds to the bushel of wheat, corn, rye, and other products—in all, 33.

Providing that a transfer of property between husband and wife shall not be valid against a third person unless it is placed on record.

Providing for pensioning Confederate soldiers and sailors and widows; appropriating \$150,000 for each of the two years to come, instead of \$75,000 yearly, as heretofore.

An appropriation of \$1,000,000 was made for the public schools, and \$272,535 for colleges, white and colored; for hospitals and other charitable institutions, \$289,918.

Two constitutional amendments were passed, to be submitted to vote in November. One requires the poll tax of each county to be retained for the school fund there, repealing the provision that all the poll tax money be apportioned among the

school districts in proportion to the number of children. The other provides for a new legislative apportionment, according to the results of the census. The last was made in 1882. Both these were carried at the election. They become parts of the Constitution only after legislative enactment to insert them.

The so-called Noel amendments were supposed to have been carried at the election of 1899, having received more votes in favor than against their adoption. This Legislature passed a resolution to insert them in the Constitution; but the question of their adoption came before the courts, and the decision was that an amendment should receive a majority of all the votes cast at the election. It was held, also, that they were not properly submitted, having been submitted as one, while they were really four; and the Constitution requires that each amendment be submitted separately. They concerned the judiciary and made it elective. An amendment passed in 1898, and ratified at the polls that year, giving levee commissioners power to cede to the Government their levees and rights of way was inserted in the Constitution by resolution.

Political.—No State election was held this year. The most notable event in State politics was the action of the Democratic State Committee, which met April 30, and ordered a plurality primary for the choice of delegates to the national convention and presidential electors for June 21. This action was contrary to all party precedent; State conventions have been the regular method for electing such representatives. Strong protests came from all over the State, and the committee was urged to reconsider its action and arrange for a convention. It did not do so, and a convention was otherwise called, which met at Jackson, June 5. Resolutions were passed strongly condemning the action, and charging the committee with the design of perpetuating itself, since it has been the custom for a new State committee to be chosen at each convention, and especially condemning the refusal to reconvene the committee to reconsider "their unwarranted, unprecedented, unnecessary, and undemocratic action." Other resolutions declared for Mr. Bryan, and denounced the policy of the administration on currency, expansion, the tariff, and militarism; opposed trusts, favored the Nicaragua Canal, and denounced the Hay-Pauncefote treaty; and commended the State administration. Delegates and electors were nominated and a new State committee. On the part of the committee it was declared that in 1899 the State committee was chosen for four years—that is, till the year of the next State election.

Gross frauds were charged at the primaries, especially in Coahoma, Warren, and Issaquena Counties.

A Republican State convention was held April 26. The party principles were reaffirmed and delegates to Philadelphia selected. The electoral ticket was made up in August.

The People's party met in convention Aug. 15 and named candidates. The most significant part of the platform was the resolutions following: "We do most solemnly and earnestly warn the people of this nation that the action of the Democratic party at Kansas City in relegating the financial question to the rear and making imperialism the paramount issue is the rankest deceit and treachery, and is calculated to mislead the people from the real issue. We hereby most earnestly assert that the financial question and Government ownership and control of public utilities are the paramount issues now before the American people."

The vote for President stood: Bryan, 51,706;

McKinley, 5,753; Barker, 1,644. All the members of Congress elected are Democrats. The vote for the poll tax amendment (omitting that of Bolivar County) was 42,931 for, to 7,522 against. On the apportionment amendment, 32,035 for, to 6,843 against.

MISSOURI, a Western Mississippi valley State, admitted to the Union Aug. 10, 1821; area, 69,415 square miles. The population, according to each decennial census since admission, was 140,455 in 1830; 383,702 in 1840; 682,044 in 1850; 1,182,012 in 1860; 1,721,295 in 1870; 2,168,380 in 1880; 2,679,184 in 1890; and 3,106,665 in 1900. This is an increase since 1890 of 15.9 per cent. The city of St. Louis had in 1900 a population of 575,238. Capital, Jefferson City.

Population.—The population by counties, according to the census of 1900, was as follows: Adair, 21,728; Andrew, 17,332; Atchison, 16,501; Audrain, 21,160; Barry, 25,532; Barton, 18,253; Bates, 30,141; Benton, 16,556; Bollinger, 14,650; Boone, 28,642; Buchanan, 121,838; Butler, 16,769; Caldwell, 16,656; Callaway, 25,984; Camden, 13,113; Cape Girardeau, 24,315; Carroll, 26,455; Carter, 6,706; Cass, 23,636; Cedar, 16,923; Chariton, 26,826; Christian, 16,939; Clark, 15,383; Clay, 18,903; Clinton, 17,363; Cole, 20,578; Cooper, 22,532; Crawford, 12,959; Dade, 18,125; Dallas, 13,903; Daviess, 21,325; DeKalb, 14,418; Dent, 12,986; Douglas, 16,802; Dunklin, 21,706; Franklin, 30,581; Gasconade, 12,298; Gentry, 20,554; Greene, 52,773; Grundy, 17,832; Harrison, 24,398; Henry, 28,054; Hickory, 9,985; Holt, 17,083; Howard, 18,337; Howell, 21,834; Iron, 8,716; Jackson, 195,193; Jasper, 84,018; Jefferson, 25,712; Johnson, 27,843; Knox, 13,479; Laclede, 16,523; Lafayette, 31,679; Lawrence, 31,662; Lewis, 16,724; Lincoln, 18,352; Linn, 25,503; Livingston, 22,302; McDonald, 13,574; Macon, 33,018; Madison, 9,975; Maries, 9,616; Marion, 26,331; Mercer, 14,706; Miller, 15,187; Mississippi, 11,837; Moniteau, 15,931; Monroe, 19,716; Montgomery, 16,571; Morgan, 12,175; New Madrid, 11,280; Newton, 27,001; Nodaway, 32,938; Oregon, 13,906; Osage, 14,096; Ozark, 12,145; Pemiscot, 12,115; Perry, 15,134; Pettis, 32,438; Phelps, 14,194; Pike, 25,744; Platte, 16,193; Polk, 23,255; Pulaski, 10,394; Putnam, 16,688; Ralls, 12,287; Randolph, 24,442; Ray, 24,805; Reynolds, 8,161; Ripley, 13,186; St. Charles, 24,474; St. Clair, 17,907; Ste. Genevieve, 10,359; St. Francois, 24,051; St. Louis, 50,040; St. Louis city, 575,238; Saline, 33,703; Schuyler, 10,840; Scotland, 13,232; Scott, 13,092; Shannon, 11,247; Shelby, 16,167; Stoddard, 24,669; Stone, 9,892; Sullivan, 20,282; Taney, 10,127; Texas, 22,192; Vernon, 31,619; Warren, 9,919; Washington, 14,263; Wayne, 15,309; Webster, 16,640; Worth, 9,832; Wright, 17,519.

Government.—The following were the State officers during the year: Governor, Lon V. Stephens; Lieutenant Governor, August H. Bolte; Secretary of State, Alexander A. Lesueur; Treasurer, Frank L. Pitts; Auditor, James M. Seibert; Adjutant General, M. Fred Bell; Attorney-General, E. C. Crow; Superintendent of Education, W. T. Carrington; Railroad and Warehouse Commissioners, T. J. Hennessey, J. Flory, W. E. McCully; Secretary State Board of Agriculture, John R. Rippey; Commissioner of Insurance, E. T. Orear—all Democrats, except Flory, Republican; Chief Justice of the Supreme Court, James B. Gantt; Associate Justices, Thomas A. Sherwood, Gavon D. Burgess, L. B. Valliant, W. C. Marshall, Theodore Brace, Democrats, and Walter M. Robinson, Republican; Clerk, J. R. Green, Democrat.

The Legislature, which holds biennial sessions, has in the Senate 25 Democrats and 8 Republicans;

in the House, 75 Democrats, 50 Republicans, and 1 Populist.

Finances.—The bonded debt of the State, on Jan. 1, 1899 (latest official report), was \$3,642,000. This shows a net reduction of \$1,334,000 in the two preceding years. The bonded debt of cities and towns on the same date was \$25,601,478. This will be increased in 1901 by the \$5,000,000 authorized for the St. Louis Fair. County and township bonds to the amount of \$9,530,507 have been issued in 59 counties, while 76 have no bonded debt. The State certificates of indebtedness on Jan. 1, 1899, amounted to \$4,393,839.40.

In 1899 the Treasurer reports \$795,000 of interest-bearing debt was paid off, being \$545,000 more than the constitutional provision relating to State debt requires. The estimate for 1900 is about \$500,000.

Valuation.—By the latest biennial report (1900), the total valuation for the State real and personal property is given at \$1,093,091,204. For St. Louis the figures are \$337,632,192, on a rate of 66½ of real value. The farm areas are given at 41,499,765 acres, valued at an average of \$7.75.

Banks.—On Oct. 31, 1900, there were 67 national banks in the State, with a note circulation of \$12,281,374; capital paid up, \$17,950,000. State banks reported—564, with a capital of \$17,795,900; surplus, \$6,010,122; revenue tax paid, \$54,703. The number of private banks was 41; capital stock, \$1,701,370; tax paid, \$4,866. Loans and trust companies, 9; capital, \$6,551,393; surplus, \$2,569,118. The total State bank capital reported was \$43,844,563. There are 55 savings banks, with deposits to the amount of \$16,535,769.12.

Education.—The State system embraces the University, Agricultural College, School of Mines, 3 normal schools, 1 institute for colored teachers, with 10,326 public schools and 181 high schools and seminaries.

The total amount of the school funds is \$12,447,242.69.

The State University, at Columbia, has 8 departments—academic, normal, law, medicine, military science and tactics, agriculture, and mechanic arts, with school of mines and metallurgy at Rolla. The enrollment for 1900 was 1,035 at Columbia, and at Rolla 165, showing an increase of nearly 28 per cent.

The State normal schools are 4, including the Lincoln Institute (colored), at Kansas City. The others are at Kirksville, Warrensburg, and Cape Girardeau. The number attending the 3 last was—males, 1,028; females, 1,111. The total expenditures were \$59,015.98. The Lincoln Institute had of students—males, 110; females, 131. The annual expenditures at the last report were \$13,501.46. State Superintendent Carrington reported 1,900 private institutions of learning as follows: 1 each sectarian and nonsectarian universities, 36 sectarian colleges and academies and 17 nonsectarian, 14 professional schools, and 10 each separate male and female academies. Thirty-four of these private institutions of higher or special learning are open to both sexes. The school age in Missouri is from six to twenty years, and the expense per pupil is \$16.13 a year. The attendance is 2.30 per cent. of the total population.

A notable addition to colleges is the Ruskin, at Trenton. It is founded on the same general lines as Ruskin Hall at Oxford, England.

State Institutions.—In addition to the State University, at Columbia, and its School of Mines, at Rolla, the State maintains four normal schools, one, the Lincoln Institute, being for the training of colored teachers. There are also schools for deaf and dumb, blind, boys' reform and girls'

industrial, an institution for feeble-minded, three insane asylums, three soldiers' homes, a fruit-raising experimental station, and the State Penitentiary.

On Jan. 1, 1899 (the latest official report), the Auditor presented as total expenses for the blind school, with an average of 327 pupils for the preceding biennial period, \$55,860.56. Under the estimate of Sept. 30, 1900, the Governor's examination gives the year's expenditure as about \$33,000. For a building site, \$82,298.88 was expended. Several light occupations are taught.

For the Deaf and Dumb School in 1900 an estimated cost of \$30,000 was given.

The Girls' Industrial School is credited with good management and progress.

The Boys' Reform School had 435 inmates at the last report, and the institution was crowded, but well cared for and healthful. The average annual expenditure for the boys' school is estimated at \$31,000, and for the girls' school at \$14,000.

The soldiers' homes—two for Confederate and one for National veterans—are estimated as costing \$36,000 yearly. The State maintains three insane asylums, at the estimated cost of \$385,000. It also appropriated \$10,000 in aid of one in St. Louis. The State Penitentiary is practically self-sustaining, the total earnings of the prisoners showing, on Oct. 1, 1900, a balance of \$56,802.96. This includes all running expenses and salaries, besides new buildings and repairs.

Agriculture.—According to the latest report of the United States Department of Agriculture, the 8 principal crops raised in the State in 1900 occupied 9,090,125 acres, an increase over 1899 of 859,741 acres. The yield for corn, wheat, oats, rye, buckwheat, and barley was 224,402,673 bushels, an increase over the preceding year of 39,720,933 bushels. Prices were also higher. The acreage in potatoes for 1900 was 108,677 acres, an increase of 3,165 acres. The yield was 10,106,961 bushels, an increase also of 1,349,465. The acreage in hay was 2,145,748, and the production 2,768,015 tons, a decrease for the year of 112,270 acres and in yield of 326,379 tons. Corn, oats, wheat, and potatoes are the largest producers. Average values were somewhat higher in 1900 than in the year preceding.

Insurance.—The State Superintendent reports (April, 1900) for the year preceding 347 companies doing business in the State, of which 141 were life, 39 fraternal, and the others fire and miscellaneous. The business done in the State was as follows: Life policies in force, 73,192; industrial, 313,527; issued in year, 21,379 and 161,714; claims paid, \$2,433,368.87 and \$480,570.60; premiums collected, \$7,274,719.40 and \$465,189.85. Fraternal insurance was in the State for 1899: In force in Missouri, \$252,233,106.25; paid during year, \$2,303,262.80; assessments collected, \$2,361,795.25. Other life and accident companies showed for the year 8,762 policies issued, 16,858 in force; with amounts for each class of \$15,930,305 and \$32,278,621. All insurance companies other than life showed: Risks written, \$173,671,696.37; premiums received, \$6,661,791.92; losses paid, \$3,439,579.23; losses incurred, \$3,650,227.40.

Railroads.—The State Railway and Warehouse Commission abrogated in 1900 its practice of levying an arbitrary sum per mile to cover "miscellaneous property," having realized that the courts would not sustain the practice. The valuation for taxation (1900) was as follows: Steam roads, \$77,448,204.30; street roads, electric etc., \$21,045,288; bridges, \$2,865,000; telegraph lines, \$2,002,507.71. There are 6 counties without railroads. The num-

ber of railroad employees, June 30, 1900, was 23,692; for street railways (estimated), 45,000. Not including logging, electric, cable, or horse-power roads, there are 147 railroads and 57 companies in the State, 1,632 stations, and 1,256 station houses. One employee in 2,118 was killed, and 1 in 205 injured during the year preceding. Of passengers, 1 in 4,679,447 was killed, and 1 in 324,962 injured. The earnings of the railroads were reported at \$17,296,880; taxes paid, \$904,422.15.

Labor Troubles.—The street-car strike in St. Louis in 1900 was the only movement of importance. It lasted several weeks, and cost the city \$157,000 for police work, and involved 33,000 men, only 4,394 failing to go on strike. The street railways affected involved 436 miles. The losses reached several million dollars in wages and costs to both sides. Gov. Stephens refused to call out the militia, on the ground that the sheriff had not exhausted his powers to keep the peace. The result was an arrangement which granted in some form most of the original demands of the strikers.

Department Store Taxation.—The State Supreme Court, Feb. 20, rendered a decision adverse to the constitutionality of the act passed in the preceding session of the Legislature allowing county and municipal authorities to levy a special license tax on department stores. The case of the State of Missouri *ex rel.* John C. Wyatt *vs.* Thomas R. Ashbrook, Rice D. Greky, and John F. Johnson was brought by mandamus from the Buchanan County court for the purpose of compelling the authorities of St. Joseph to issue a merchant's license to Wyatt for the conducting of a department store.

Under the law appealed from there had been a refusal to issue the license unless the relator would first pay to the city two thirds and to the State one third of the amount required under section 6 of the act, which provided for a license tax on each of 23 groups of goods sold in department stores of \$300 to \$500, at the discretion of the taxing authority. The Supreme Court decided this discretionary provision to be at variance with the State Constitution, in that it was "class" and "special" legislation. The court declared the act to be an "arbitrary and unreasonable classification of merchants for the particular purpose of this particular imposition," involving also "inequality and want of uniformity" in determining the amount of tax. A peremptory writ of mandamus was ordered issued.

Louisiana Purchase Exposition.—In addition to the \$5,000,000 in exposition bonds to be issued by the city of St. Louis and the \$1,000,000 authorized for expenditure by the State for this exposition under legislation of 1890, the first session of the Fifty-sixth Congress also authorized an appropriation of \$5,000,000 in aid of it. It is to be disbursed for the exposition of 1903 under rules and regulations prescribed by the Secretary of the Treasury, but these are to be operative only after the sum of \$10,000,000 has been raised by the corporation having the exposition in charge. It is also provided that the United States is to be repaid in due proportion with such repayments as are made out of the proceeds of the Louisiana Purchase Exposition to the city of St. Louis and the State of Missouri.

Political.—In the presidential election, the State gave 351,912 votes for the Democratic ticket, 314,091, for the Republican, 5,965 for the Prohibition, and 6,123 for the Social-Democratic.

The Democratic State convention met at Jefferson City, June 14, and nominated the following ticket: For Governor, Alexander M. Dockery; Lieutenant Governor, John A. Lee; Secretary of

State, Samuel B. Cook; Treasurer, Robert P. Williams; Auditor, Albert O. Allen; Attorney-General, Edward C. Crow; member of Railroad and Warehouse Commission, — Harrington. All these nominees were elected in November by an average vote of 350,000; Gov. Dockery's vote was 350,045.

The Democratic Judicial Convention met at Sedalia, July 17, and nominated for Chief Justice James B. Gantt; for Associate Justices, Thomas A. Sherwood, Gavon D. Burgess, Theodore Brace, and L. B. Valliant—all of whom were re-elected.

Constitutional Amendments.—At the election in November, 1900, 7 amendments to the Constitution were ratified. Under the first, county courts, in their discretion, may levy a special tax not to exceed 15 cents on the \$100 of tax valuation for roads and bridges. Three other amendments provide that in courts of record three fourths of the jury in a civil case may determine the cause; that in courts not of record, in both civil and criminal cases, two thirds of a jury may render a verdict. Juries may be composed of fewer than 12 men, and criminals prosecuted may be convicted upon either information or indictment. Courts having power to try felony cases may dispense with grand juries, which are to be convened on the judge's order. By the fifth amendment a new system of taxation as to mortgages is made operative.

MIVART, ST. GEORGE (mi-vart'), an English biologist, born in Brook Street, Grosvenor Square, London, Nov. 20, 1827; died at his home, 77 Inverness Terrace, in that city, April 1, 1900. He began his studies as a boy at Clapham Grammar School, went thence to Harrow, and afterward entered King's College, London. It had been his father's wish that he should go to Oxford, but the lad, having at the age of seventeen become a member of the Roman Catholic Church, which at the time was a bar to matriculation at Oxford, took his final course at St. Mary's College, Oscott. He next studied law, and in 1851 was called to the bar at Lincoln's Inn; but it is not recorded that he ever practiced. A strong bent toward scientific pursuits had already declared itself, and, yielding to this, he concentrated his attention first on medical, and later on a wider range of biological study. In 1855 he became a fellow of the Zoological Society of London, and by 1862 had made such progress in the medico-biological sciences that he was appointed lecturer on comparative anatomy at St. Mary's Hospital. In recognition of his valuable researches in structural anatomy he was elected a fellow of the Royal Society in 1867, and two years later was made vice-president of the Zoological Society. From 1874 to 1880 he held the position of secretary of the Linnæan Society of London, afterward serving for many years on its council, and at one time as a vice-president. In 1874 he was appointed Professor of Biology at University College, London; was created Ph. D. of Rome by the Pope in 1876; and in 1884 received the degree of M. D. from the University of Louvain, in which institution later he accepted the post of Professor of the Philosophy of Natural History. In 1896 he was again elected vice-president of the Zoological Society of London, continuing in the position until 1899, when failing health forced him to resign.

Dr. Mivart first became known in scientific circles through his fruitful anatomical researches into the structure of vertebrate animals, his work, though chiefly on the mammals, including also birds, fishes, and reptiles. He was noted as an exceedingly accurate and painstaking observer, who, omitting no detail, unearthed a surprising number of new facts in fields that had already been worked

by many eminent predecessors, while "leaving little to be found out by succeeding naturalists in the animals with which he dealt." The results of these investigations began to appear in 1867 in a series of memoirs on the anatomy of the insectivora, which were published in the *Journal of Anatomy and Physiology* for 1867 and 1868 and in the *Proceedings of the Zoological Society* for 1871. In the seventies, in the latter serial there also appeared a Memoir on the Axial Skeleton of the *Struthionidæ*, a second on that of the *Pelecanidæ*, and a third on the structure of the fins of the elasmobranch fishes and the nature and homologies of vertebrate limbs generally. Subsequently turning his attention to the carnivora, he published in 1882, in the *Zoological Proceedings*, two papers dealing with the classification, distribution, and anatomy of the æluroid carnivora, and in 1885 there followed another paper in which the artoid carnivora were treated in a similar manner. In 1890 three papers on the *Canidæ* appeared in the same *Proceedings*, and as late as 1896 two others on the bony structure of certain lorries and parrots. These and many other papers, some fifty in all, contain the results of Dr. Mivart's original investigations, which, taken together, have materially advanced our knowledge of the structure and relationships of the higher animals, while they at the same time form a broad and enduring basis for his scientific reputation.

But extended and valuable as the work they record undoubtedly is, these memoirs represent only a small part of his published writings. Besides the articles on Apes, on the Skeleton, and on Reptiles, written for the ninth edition of the *Encyclopædia Britannica*, he was a frequent contributor to several of the leading English periodicals, such as the *Quarterly*, *Fortnightly*, and *Contemporary Reviews* and the *Nineteenth Century*, and the author of a considerable number of scientific books, several of which have been widely read. His first work, the *Genesis of Species*, appeared in 1871, and was so well received that a second edition was called for in less than a year. It is in this volume that the author sets forth certain original views on the subject of evolution in general, and natural selection in particular, which called out a good deal of pointed criticism at the time from the followers of Darwin. Denying to the principle of natural selection a controlling influence in the evolution of living forms, Dr. Mivart insists on the guiding action of a Divine power, advocates the creation theory, but at the same time takes care to distinguish between *absolute* and *derivative* creation, and claims that it is with the latter only that the evolutionist is concerned. He also urges the view that while man's body is the result of evolution, no such origin can be made to account for his intellect. His second book, *Lessons in Elementary Anatomy*, was published in 1872; *Man and Apes*, in 1873; *Lessons from Nature and Contemporary Evolution*, in 1876; *The Cat*, 1881; *Nature and Thought*, 1883; *The Origin of Human Reason*, 1889; *A Monograph of the Canidæ*, 1890; *Birds*, 1892; *Types of Animal Life*, 1893; and *An Introduction to the Elements of Science*, 1894.

Whether combating the hypothesis of natural selection or writing on the relations of science and religion, Dr. Mivart's books, and particularly his essays in the magazines, reached and influenced a wide circle of readers. His style was clear and vigorous, impressive in its earnestness, and although much that he wrote was of a controversial character and on subjects that took strong hold of the feelings, his articles were always marked by a dignity, a respect for fact, and a regard for his opponents that deserved, as they received, the warmest

appreciation. Indeed, it is believed by many who are familiar with his work that his success as a popular writer on his favorite subjects is quite up to, if it does not overshadow, his achievements as a discoverer.

There is nothing in Dr. Mivart's career that affords a better example of the true scientific spirit by which he was animated than the manner in which he met only a short time before his death an attempt to coerce his religious views. Though a consistent Catholic for many years, he late in life became somewhat restive apparently, under what he regarded as illiberal and unprogressive tendencies in his Church, particularly in its attitude toward science. The feeling seemed to grow upon him, until at length he ventured to criticize, in a public way and from a scientific standpoint, certain doctrines of the Catholic faith with which he was unable to agree. This was done, as he afterward explained, with the purpose of testing the question whether it was possible for *liberal* Catholicity to maintain itself and make headway within the Roman communion. For this he was violently assailed by a leading Catholic newspaper, and, feeling that he had been made the victim of a gross injustice, he appealed to Cardinal Vaughan for redress. A considerable correspondence ensued, in which demands were made upon him that he would not obey, the controversy finally resulting in his forced retirement from the Church. Dr. Mivart's part in this correspondence indicates that for some years a conflict had been steadily growing in his mind between the force of private judgment and the necessity of submission to authority. In the end the former proved too strong to be overcome, and, true to his mature convictions, he quietly accepted the consequences.

Personally, Dr. Mivart is described as a man of fine presence and the possessor of a charm of manner that was alike conspicuous before an audience, in the discussions of the scientific society, and in the ordinary intercourse of daily life.

MONTANA, a Western State admitted to the Union Nov. 8, 1889; area, 146,080 square miles. The population, according to each decennial census since admission, was 132,159 in 1890, and 243,329 in 1900. Capital, Helena.

Government.—The following were the State officers in 1900: Governor, Robert B. Smith; Lieutenant Governor, A. E. Spriggs; Secretary of State, T. S. Hogan; Treasurer, T. E. Collins; Auditor, T. W. Poindexter, Jr.; Attorney-General, C. B. Nolan; Superintendent of Education, E. A. Carleton—all elected on a fusion ticket of Democrats and Populists; Adjutant General, Charles F. English; Commissioner of Agriculture and Labor, J. H. Calderhead; Land Commissioner, H. D. Moore; Mine Inspector, John Byrne; Boiler Inspector, Frank A. Burns; President of the Board of Sheep Commissioners, Thomas H. Power; Bank Examiner, J. G. Moroney; Chief Justice of the Supreme Court, Theodore M. Brantley, Republican; Associate Justices, W. H. Hunt, Republican, who resigned and was succeeded in June by Robert L. Word, and W. T. Pigott, Democrat; Clerk, Henry G. Rickerts, Democrat.

The State officers are elected for terms of four years in November of the years of presidential elections. The term of justices of the Supreme Court is six years.

The Legislature meets biennially in January of the odd-numbered years.

Population.—Following is the population of the counties as returned for the census: Cascade, 25,777; Beaverhead, 5,615; Broadwater, 2,641; Carbon, 7,533; Choteau, 10,966; Custer,

7,891; Dawson, 2,443; Deer Lodge, 17,493;ergus, 6,937; Flathead, 9,375; Gallatin, 9,553; Granite, 4,328; Jefferson, 5,330; Lewis and Clarke, 19,171; Madison, 7,695; Meagher, 2,526; Missoula, 13,964; Park, 7,341; Ravalli, 7,822; Silver Bow, 47,635; Sweet Grass, 3,066; Teton, 5,080; Valley, 4,355; Yellowstone, 6,212; Crow Indian Reservation, 2,660.

Butte is the largest city in the State, having this year a population of 30,470, against 10,723 in 1890, and 3,363 in 1880. Great Falls is second with 14,932, and shows the largest percentage of increase; it did not exist in 1880, and in 1890 it had only 3,797 inhabitants. Helena, the third in size, shows a decrease from 1890, when it had 13,834; in 1900 the figures were 10,772. Anaconda has risen from 3,975 to 9,450. The other large towns are: Missoula, 4,329; Bozeman, 3,435; Billings, 3,221; Livingston, 2,780; Walkerville, 2,622; Kalispell, 2,527; Red Lodge, 2,152; Miles City, 1,747; Dillon, 1,530; Fort Benton, 1,024.

Finances.—The State has no bonded debt. The State institutions have bond issues, secured by the land grants, all bearing 6 per cent., running from ten to thirty years, as follows: Agricultural College, \$100,000; Normal School, \$50,000; university, \$100,000; Deaf and Dumb Asylum, \$40,000; Capitol Building, \$350,000; School of Mines, \$120,000. The State is not responsible for either principal or interest on these bonds.

The Treasurer's annual report, published in December, shows a balance on hand in the general fund of \$71.28. The general fund finances are as follow: Outstanding general fund warrants, \$243,970.07; estimated interest, \$3,500; total, \$247,470.07.

The Treasurer estimates that there is due in taxes and licenses \$360,000. Adding to that the cash on hand makes a credit balance of \$112,601.21. It is estimated that outstanding warrants not registered may bring the actual cash credit, Jan. 1, down to \$50,000. This is the first time in the history of the State that the Treasurer has been able to take up all outstanding warrants at the close of the year.

The report shows a balance to the credit of the 24 institution and commission funds of \$514,627.

A comparative statement of receipts from each of the 24 counties shows a net increase of \$58,378.37. With the exception of Dawson, Deer Lodge, Gallatin, Granite, and Silver Bow, an increase of revenue is true of every county.

The receipts from the inheritance tax during the year were \$5,058.66.

The 5-per-cent. wolf bounty tax, levied upon stock interests, netted the State \$157,139.93. During the year warrants amounting to \$142,745.50 were paid, leaving an unexpended balance of \$14,394.43.

A statement of the stock inspector and detective fund is given as follows: Balance in fund, \$16,460.69; receipts, \$21,282.60; warrants paid, \$19,042.50; balance, \$18,700.79.

Cash and securities of credit of the permanent school fund amount to \$340,495.10, bearing interest for the most part at 6 per cent.

The receipts of the Secretary of State in fees, licenses, etc., were \$13,532.15.

Education.—The report of the public schools for the year ending Aug. 31 gives the following data: There are 57,210 children of school age, an increase of 3,578 compared with the preceding year. The enrollment at the end of the school year in the public schools was 39,430, or 2,213 more than that of the preceding year. There were

1,898 children in private schools compared with 1,586 in 1899.

The public schools were taught by 1,214 teachers, all but 202 of whom are women. There were 1,126 teachers in the State in 1899.

The teachers were paid \$570,161.72 during the year. The average salary for men was \$69.04, and for women, \$50.30 a month.

The public school libraries have 32,987 volumes.

The State appropriation for 1899 amounted to \$80,246. This sum was apportioned at the rate of \$1.50 per capita for each census child.

The School of Mines was opened for the reception of students Sept. 11. The courses of study extend over four years, and are devoted strictly to those branches of science that are required in the field of mining and mining engineering. Twenty-five students are attending daily recitations. Five others are taking selected studies in mineralogy, geology, physics or assaying. A very large number of applications for admission have been refused because of lack of preparation. The faculty is giving special attention to the building up of a cabinet that shall be as nearly as possible a complete representation of the ores and mineral resources of Montana.

Some very valuable donations of maps, mine models, and mining machinery have been made by some of the great mining companies of Butte.

The estimate of expenses for the Normal School for two years was \$35,355. Money is required for dormitories and other additions. The attendance was reported to have fallen off during the spring term.

The Agricultural College has an attendance of 250.

The enrollment at the State University, not including that of the School of Music, was 243 in the fall term, compared with 203 at the same time in 1899. The cost of maintenance was \$23,810. New departments created at the university are history and philosophy, chemistry and physics, biology, modern languages, ancient languages, English and literature, drawing, mathematics, and mechanical engineering. Fifteen degrees were conferred this year, 14 bachelor's and 1 master's.

Under the law for the establishment of county high schools, 7 or 8 have been opened, but all are in rented quarters. It appears that the law is defective in not prescribing a practicable way of raising money for the schools. Where bonds have been offered for sale, prospective buyers have been advised that they were illegal, and no sales have resulted.

The Montana Wesleyan University received additions to its funds amounting to \$20,000 between Aug. 1 and Dec. 1. The attendance has largely increased, about 130 being present in September.

Charities and Corrections.—The number of patients at the State Institution for the Insane, at Warm Springs, according to the report at the end of the year, was 479; of these, three fourths were men. In the year 50 were discharged as cured, and 19 dismissed as partly cured to the care of relatives, 64 died, and 12 escaped. From 11 inmates who paid in part for their board \$1.427 was received. The expenses for the year amounted to \$115,142.

The membership of the Soldiers' Home at the close of the year was 65 against 51 at the beginning. The resources of the home during the fiscal year were: Balance on hand at beginning of year, \$1,414.06; State appropriation, \$5,196; received from pensions, \$854.25; received from Government, \$4,008.25; from sale of buildings at Fort Maginnis, \$1,700; total, \$13,172.56.

The expenditures amounted to \$11,522.76, of which \$4,000 went for subsistence.

The Montana Children's Home Society has placed 150 children in homes since its organization.

The Institute for the Deaf and Dumb had a larger attendance this year than ever. The building has been improved, and new departments of instruction introduced.

There were 354 prisoners at the State Prison in December. Unconditional pardons were granted to 26 in the year and diminutions were given in 75 cases.

Militia.—The report of the Adjutant General says: "On April 1, 1898, this State had 1 company of artillery, 2 troops of cavalry, 9 companies of infantry, and 1 mounted company of infantry. Of this force all were called for (with the single exception of the artillery) by the War Department for the Spanish-American War, and were mustered into the United States service. The terms of enlistment in nearly all the companies that composed the old guard expired with their muster out of the United States service. The infantry and cavalry arm of the service were not continued, and our State is left with the least number of organized militia to her credit of any in the Union.

"The number of persons in the State subject to military duty is estimated at 31,258, an increase of 3,744 in two years.

"The expenditures from the National Guard fund for the two years were as follow: For 1899, annual appropriation \$2,500, expenditures \$1,447.50; for 1900, annual appropriation \$2,500, expenditures \$1,427.37."

Of the Fort Ellis military reservation he says: "In the possession of old Fort Ellis the State is indeed fortunate. It is centrally located, and is admirably adapted for the site of an encampment. The guard has held no encampment since 1890, and this has led settlers to believe that the State has forfeited its rights to hold it."

Railroads.—According to figures from the office of the State Board of Equalization, the railroads paid in taxes in 1900, exclusive of special school and city taxes, \$364,035.83. The taxes on the railways proper, the roadbeds, rails, bridges, etc., amount to \$290,830.68. The taxes on the roundhouses, depots, shops, and other buildings amount to \$18,121.90, while the taxes on the lands amount to \$55,083.25. There are 2,932.21 miles of railroad in the State upon which taxes were paid.

A line from Kalispell to Flathead lake is building, which will connect the head of the lake with the main line of the Great Northern.

Banks.—Following is the summary of the condition at the close of business, Nov. 30, of the 14 banks, as reported to State Bank Examiner: Deposits, \$7,711,425; loans and discounts, \$6,483,269; cash and clearance items, \$1,319,941; due from other banks, \$2,156,720.

There was an increase of 10 per cent. in the deposits and loans and discounts of the State banks during the last fiscal year. Six of the 14 State banks paid dividends aggregating \$52,000.

Public Lands.—The report of the Land Commissioner shows that during the fiscal year 570 new leases and permits were issued, covering 388,711 acres, giving the State a revenue of \$42,767.34. Including the leases and permits issued during the previous years, 1,912 leases are in existence, producing during the year a revenue of \$144,383.76. Of all classes, there are now under lease and yielding revenue to the State 1,265,895 acres of land, representing an increase of \$35,077.66.

The receipts for the year represent very largely rentals, as the department has considered it good policy to rent State lands rather than place them on the market. Under the existing policy the State receives an income of 6¼ per cent. from its land, and still retains title.

During the year the total income from State lands was \$200,275.25.

The State has relinquished lands within the reservations amounting to 315,050 acres, and has secured other lands in their place.

Insurance.—The Auditor attends to the collection of fees and taxes from the insurance companies, which now amount to about \$60,000. There is as yet no State office of Insurance Commissioner.

Wolves and Coyotes.—According to the payments under the wolf bounty law, the number of wolves killed during the fiscal year was 5,117, and of coyotes 22,513.

Products.—Montana is the chief wool-producing State in the Union, and has more sheep than any other State except one. The clip this year exceeded 24,000,000 pounds, and the price received was better than the average.

A great percentage of the gold and silver produced in Montana came from the copper ores of Butte—almost two thirds of the silver and fully one fourth of the gold. The rest is from smelting ores, mill bullion, cyanide vats, and placer mines in other parts of the State. Every coal-mining district in the State where there are developed mines was worked to its full capacity during the year, with the exception of Belt.

In point of value copper is a long way in the lead of other metals produced in the State. The value of the copper output, according to the assayer's report, was \$40,941,905.14. The value of the gold produced was \$4,819,156.95; of silver, at coinage value, \$21,786,834; of lead, \$909,410.33.

Political.—The political situation this year was much involved. The Republican party, though seemingly united upon one ticket, appears not to have been at peace with itself, one part charging that the other part had been brought under the control of the Standard Oil and Amalgamated Copper trusts. The Democratic party was divided into what were popularly known as the Clark faction and the Daly faction, and had two tickets at the polls. Six parties put up State tickets—the Republican, Democratic, Independent-Democratic, People's, Union-Labor, and Social-Democratic. The Prohibition and Social-Labor parties made nominations for presidential electors, but none for State officers. By fusion the State tickets were reduced to four before the election. The courts were called upon to decide in several cases which of opposing candidates for county offices were entitled to places on the ballot as candidates of their party.

The Republicans held a convention in Helena, May 17, to name delegates to the national convention. Resolutions were adopted approving the national administration, favoring the renomination of President McKinley, calling for legislation against trusts, and condemning the 11 Republicans that voted for W. A. Clark.

The convention for nominating State officers met in Helena, Sept. 5. Following is the ticket: For Governor, David E. Folsom; Lieutenant Governor, A. J. Bennett; Secretary of State, A. N. Yoder; Attorney-General, T. J. Porter; State Treasurer, Frank J. Edwards; State Auditor, C. C. Proctor; Associate Justice, Rudolph von Tobel; Superintendent of Public Instruction, W. E. Harmon.

The first Democratic convention was called to

meet at Butte, June 20. The Clark men apparently were in the majority, but the Daly men were in control; and after some struggles the Clark men withdrew, and two conventions were held. The Daly faction adopted a platform denouncing the action of W. A. Clark, of Butte, in corrupting the late Legislature, in assailing the integrity of the Supreme Court, and attempting to debauch the people of the entire commonwealth, as the colossal crime of the century.

Senator Clark's resignation after the report of the Senate committee, and his appointment by the acting Governor was denounced as "a disgrace to the State, a shame to the American nation, and an insult to the Senate."

The Clark faction adopted a platform calling the Washington investigation of Mr. Clark's election a persecution, denouncing those who instigated it, and approving the State legislators that voted for Mr. Clark.

The Democratic convention for nominating a State ticket met Sept. 19. There were contesting delegations from Butte and other places; the majority report of the Credentials Committee favored the Clark delegation, and that report was adopted by a vote of 253 to 81, whereupon the Daly contingent withdrew. They organized a new party, the Independent-Democratic, and called a convention to meet in Butte Oct. 2.

The nominations were: For Governor, Thomas S. Hogan; Lieutenant Governor, Joseph Marion; Secretary of State, George M. Hays; Treasurer, Alex. Livingston; Auditor, E. G. McLean; Attorney-General, W. R. C. Stewart; Associate Justice, Robert Lee Word; Superintendent of Schools, Prof. P. A. Leamy.

The People's party held a convention in September, and adopted a platform that denounced the Gage act and "imperialism," demanded the initiative and referendum and abolition of the circle at the head of the ballot, and pledged its representatives to vote for an eight-hour law, for a law prohibiting the employment of Japanese and Chinese labor, for abolition of the company store, for inspection of places of employment, to make blacklisting unlawful, to revise the school laws, and to give women the ballot. It favored the election of United States Senators by direct vote, denounced trusts, denounced Gov. Steunenberg, of Idaho, and extended sympathy to the Pennsylvania miners.

The regular Democrats and the People's party united upon the following ticket: For Governor, Joseph K. Toole, Democrat; Lieutenant Governor, Frank Higgins, Democrat; Congressman, Caldwell Edwards, Populist; Secretary of State, George M. Hays, Democrat; Auditor, J. H. Calderhead, Populist; Treasurer, A. H. Barret, Democrat; Attorney-General, James Donovan, Populist; Associate Justice, G. R. Milburn, Democrat; Superintendent of Public Instruction, J. M. Lewis, Populist.

The Union-Labor party, at its convention in September, declined to fuse with the Democratic and People's parties, and nominated J. A. Ferguson for Governor, Otto Schoenfeld for Lieutenant Governor, F. M. Nickerson for Secretary of State, and Robert D. Myles for Treasurer. Later it was decided to fuse, and these candidates resigned. The name of W. W. Welch, the Union-Labor candidate for Superintendent of Public Instruction, was placed on the fusion ticket.

The Social-Democratic party held a convention in Butte, Sept. 18, adopted a platform, and nominated a State ticket. The platform denounced both Democratic and Republican parties as being controlled and led by capitalists. Imperialism

and expansion were declared sham issues. The only real solution for the trust problem was the common ownership by the people of all industries. Independent political action and the trade-union movement were declared to be the chief emancipation factors of the working class. Public ownership of mines, reduction of the hours of labor, inauguration of a system of public works and improvements for employment of the unemployed, national labor legislation, equal civil and political rights for men and women, adoption of the initiative and referendum, and abolition of war and the introduction of international arbitration were demanded.

The ticket was: For Governor, J. F. Fox; Lieutenant Governor, Henry S. Davis; Secretary of State, John M. Horne; State Treasurer, Henry Toole; State Auditor, Joseph G. Hoar; Superintendent of Public Instruction, O. M. Partelow.

The Prohibition State Convention met in April in Bozeman. The platform arraigned the President for permitting canteens in the army and the liquor traffic in the new possessions under military control.

The fusion ticket was successful at the polls. On the vote for presidential electors the result was: Bryan, 37,146; McKinley, 25,373; Woolley, 298; Debs, 708; scattering, 116.

The vote for Governor stood: J. K. Toole, 31,419; D. E. Folsom, 22,691; T. S. Hogan, 9,188; J. F. Fox, 505.

The Legislature will have a large majority of members elected on the fusion ticket. The Republicans will have 32 in both houses out of the total membership of 94. This Legislature will have the duty of electing two United States Senators, one to succeed Senator Carter, and one to take the seat to which W. A. Clark was elected by the last Legislature. The investigation by Congress of the charges of bribery in connection with that election, the resignation of Mr. Clark, his appointment immediately afterward by Lieut.-Gov. Spriggs, and the subsequent revocation of that appointment and the appointment of Martin Maginnis by the Governor belong to the history of Congress.

An amendment to the Constitution was carried by a vote of 7,689 to 3,265. It provides that where one or more judges of the Supreme court are by any reason disqualified to sit, the remaining judge may call one or more district judges to sit in the case, for which the members of the Supreme bench are disqualified, and a decision given by the court so constituted shall have the same force and effect as other decisions of the court.

MORAVIANS. The statistical returns of the Northern District of the Moravian Church in America to Dec. 31, 1899, published early in 1900, give it 11,776 communicants, 1,301 noncommunicant members, and 4,780 children, making a total membership of 17,857, and 11,159 members of Sunday schools. The contributions for the year were \$126,110 for church support, \$1,582 for the Retired Ministers' fund, \$1,274 for the Bohemian mission, \$7,333 for foreign missions, \$2,823 for the Alaska mission, \$9,976 for home missions, \$3,865 for the Theological Seminary, \$1,913 for all other Moravian causes, and \$1,305 for other Christian objects. The figures show practically no gain in membership, a fact which was attributed by the Statistical Committee largely to the closing of the home mission work in the Indian Territory, which was rendered necessary because of the complications growing out of the passage of the Curtis bill. There had been, however, an increase in liberality now extending over two years. The gifts for all missionary and benevolent causes in 1898 had ex-

ceeded those of 1897 by \$4,731, and those for 1899 had been \$1,967 larger than those for 1898. Adding to the numbers given to the Northern District those reported on the same date for the Southern District—viz., 3,041 communicants, 297 noncommunicants, 1,754 children, giving a total of 5,092 members and 3,994 members of Sunday schools—there were returned for the whole Moravian Church in the American Province, 14,817 communicants, 1,598 noncommunicants, 6,534 children, making a total of 22,949 members, and 15,153 members of Sunday schools.

The entire membership of the churches of the Unity—or of the Moravian Church—in the home provinces, on the Continent of Europe, in Great Britain, and in America was 38,280. Of these members, 25,000 were communicants.

The general report of the Moravian missions for 1900 showed a net loss of 773 members, which was occasioned wholly by the transference of the entire mission in Greenland to the Danish Lutheran Church. This mission included 1,630 souls, the deduction of which from the whole number was partly made up for and reduced to less than one half by gains in other quarters of the mission field of the Church. The Mission Board of the entire Unity had now 131 stations, with 60 out stations, in 20 different countries. These missions were served by 240 brethren and 213 sisters—together 453 missionaries, or 22 more than in the previous year—and included 95,424 souls. The work of the missions on the Mosquito Coast has been interrupted by adverse action of the Government, and it has been found necessary to close the schools at Bluefields and Magdala.

MOROCCO, an empire in northern Africa. The Emperor is an absolute monarch, ruler in spiritual as well as temporal affairs, deferring only occasionally to the Sharif of Taflet, descendant of the Prophet Mohammed and of the former ruling dynasty. He is advised by his ministers when he wishes advice, but oftener merely indicates to them his decisions. The Sultan Mulai Hassan, who reigned from 1873 till 1894, was succeeded on June 7 of that year by Mulai Abd el Aziz, born Feb. 24, 1878. The Grand Vizier, in the beginning of 1900, was Ahmed ben Mussa; Minister of Foreign Affairs, Abdul Krim ben Sliman; Minister of War, Said ben Mussa; Minister of Finance, Abdesselam el Tasi; Grand Chamberlain, Dris ben Aish.

Morocco has an area of 53,800 square miles, not including the desert and its oases; with the desert, about 219,000 square miles. The population is estimated at 9,256,000, of whom 3,000,000 are Berbers and Tuaregs, 2,200,000 Shellah Berbers, 700,000 Bedouin Arabs, 3,000,000 Mued Arabs, 200,000 negroes, 150,000 Jews, and 6,000 Christians. Fez, the capital, has a population of about 140,000; Morocco, the southern capital, has from 40,000 to 50,000; and Tangier, where the representatives of foreign powers reside and where five sixths of the Christians remain, since foreigners are not welcome in the other cities, has about 30,000. The Moors are Sunnite Mohammedans of the Malekite sect.

The Sultan transfers his court periodically to the city of Morocco, in the south, or sometimes sojourns in other towns. Wherever he goes he is accompanied by his army of 10,000 infantry trained by an Englishman, 600 disciplined cavalry, several field batteries commanded by Frenchmen, and contingents furnished on demand by governors of provinces. Italian artillery and engineer officers have assisted in starting an arms factory at Fez, and Spanish and German officers are attached to the Sultan's staff. There is a militia

of 8,000 cavalry and 10,000 infantry, and tribal levies would add 40,000 irregular cavalry and infantry to the fighting strength of the Sultan, all troops of valor, formidable in the tactics suited to their country. The Sultan derives his revenue from monopolies, from taxes and tithes, and from gifts. His income is estimated at 7,000,000 francs from these sources, besides the customs dues collected at the 8 ports and applied to general administrative purposes, estimated at 12,000,000 francs a year.

The value of the merchandise imports by sea in 1898 was £1,167,447 sterling; exports, £1,161,118. The imports of cotton goods were £531,892 in value; sugar, £269,636; tea, £98,901. Other imports are silk goods, candles, woolen cloth, spirits, flour, earthenware, and glass. The exports of wool were £204,857 in value; goat skins, £181,516; eggs, £78,939; beans, £58,502; slippers, £46,745. Other exports are almonds, cattle, wax, maize, dates, and bird seed. The value of the trade with the principal foreign countries in 1898 was as follows:

COUNTRIES.	Imports.	Exports.
Great Britain	£701,753	£346,382
France.....	263,681	329,487
Germany.....	101,870	198,951
Spain	21,077	179,514

The number of vessels entered at the ports of Tangier, Dar al Baida, Mogador, Mazagan, Arisch, Saffi, Rabat, and Tetuan in 1898 was 2,089, of 997,749 tons.

After the death of Mulai Hassan the responsibilities of government were left by the young Sultan largely to the Grand Vizier, whose two brothers filled the next highest posts. In the early part of 1900 these brothers died, and in May the Vizier himself. No one was left who had experience and authority. The Moors, accustomed to despotic and arbitrary government, bend their necks only to the strong. They were alarmed and exasperated at the encroachments of the French in the Tuat oases, which have always been claimed by Morocco. The Government was momentarily paralyzed at a time when the Sharifs were proclaiming a holy war against the French and collecting the tribesmen of the desert to defend the sacred places of Taflet. A protest against French aggression had already been drawn up, but there was no one to instruct the envoy who was going to Tangier to present it to the ministers of the powers. The powers collectively were causing trouble by pressing for the right of their ministers and for Europeans in general to reside in Fez. The Sultan filled the vacant posts at court on May 13, immediately after the burial of the late Vizier, as follows: Grand Vizier, Sid el Haz Mukhtar; Minister of War, Said Gubbass; Grand Chamberlain, Sil Hassan. Abdul Krim was retained as Minister of Foreign Affairs. The French columns which were operating against the tribes that formerly paid an intermittent allegiance to the Emperor of Morocco, but more commonly set him at defiance, were re-enforced by 1,400 men, dispatched to Igli, the place occupied latest, and to Ain Sefra, where the railroad for the time ended that was pushed forward in the tracks of the conquering expedition. This latter place is in close proximity to Figuig, a territory formally acknowledged under existing treaties between France and Morocco as belonging to Morocco and the rallying point of the Moorish military force that was collected to defend the frontier and to emphasize the claims of Morocco to the districts already occupied by French troops. The

Moors were convinced that the aim of the French was to push westward to the Atlantic at the back of the Atlas range and to occupy all the doubtful territory on the frontier between Algeria and Morocco, the territory that was reserved by the delimitation treaty of 1845 for future agreement. A note was dispatched to the French Government on July 9, formally demanding European arbitration of the dispute arising from the French occupation of the oases of Tuat, Tidikelt, and Gurara and the district of Igli. Hadji Mohammed el Torres, the Sultan's representative at Tangier for foreign affairs, had previously, on June 20, addressed a communication to the powers protesting in the name of the Sultan against the French encroachments upon Tuat and Igli, a region reserved for future settlement if not actually recognized as belonging to Morocco in the French frontier treaty. None of the powers were inclined to take the part of Morocco in the controversy. Great Britain had already given France a free hand in these regions by the African agreement of 1890. The Moorish claim was based upon an article of the treaty of 1845, stating that the ancient boundary that existed between Morocco and Turkey previous to the French conquest of Algeria was retained as the boundary between Morocco and Algeria, and stipulating that no boundary stones should be erected by either party until this ancient boundary was delimited by mutual agreement. The Moorish Government offered to submit documents proving that the Deys of Algiers recognized Tuat as forming part of Morocco, and to prove furthermore that both before and after the conquest of Algeria by the French all the kadis, kaidis, and sheikhs in the disputed country had been and that they still were regularly appointed by the Government of the Sultan. On Aug. 20 the Moorish Government sent another circular to the powers protesting against the further encroachments of the French in the Tuat region and other territories, asking the powers for their assistance. The excitement caused in Fez by the French advance was attended by the killing of the manager of a French business house, Marcos

Essagin, who was an American citizen. The Jewish ghetto was next attacked by the mob, and in consequence the British, supported by other foreign representatives in Tangier, made serious representations to the Moorish Government. Both as a Jew and as a representative of French interests he incurred the hostility of the fanatical Moors by engaging in a controversy with one of their religious chiefs, whose mule he knocked against while riding on horseback through a narrow street. The actions of the crowd became so threatening that he fired his revolver, wounding a native, upon which he was immediately cut down by his assailants. The American Government presented a claim upon the Moorish Government for an indemnity for the murdered man's family. The demand of the representatives of the powers for right of access to the Sultan's court at all times and their attempt to treat directly with the Government prompted Hadji Mohammed el Torres at Tangier to inform them that correspondence with the Moorish Government must be addressed to him. They replied in a collective note that their governments could not accede to such a proposition unless he was fully empowered to settle all questions. After the death of Ahmed ben Mussa the Sultan began to take an active part in the direction of public affairs, although he did not ostracize the family of the masterful and avaricious Vizier who had made many enemies, since he appointed a brother and a cousin of the deceased statesman to posts in the ministry. When the new Government was in running order Spain pressed a demand for the transfer and the delimitation of Santa Cruz de Mar Pequeña, a seaport and district on the Atlantic coast. Morocco ceded this territory to Spain by the treaty of Wad Ras in 1860, but disputed the cession later. The harvest in 1900 was a remarkably good one, and this fact tended to avert disturbances that might have resulted from the French military operations in the disputed Saharan territory coinciding with the death of the man who has been the real ruler of Morocco since the present Sultan came to the throne.

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NATIONAL ACADEMY OF SCIENCES.

The officers of the Academy in 1900 were: President, Wolcott Gibbs; Vice-President, Asaph Hall; Foreign Secretary, Alexander Agassiz; Home Secretary, Ira Remsen, Johns Hopkins University, Baltimore, Md.; Treasurer, Charles D. Walcott. Two meetings were held in 1900. The first or stated meeting was held in Washington, April 17-19. On that occasion the following papers were read: The Cruise of the United States Fish Commission Steamer Albatross in South Seas, August, 1899, to March, 1900, by Alexander Agassiz; Secondary Enrichment of Sulphides in Ore Deposits, by Samuel F. Emmons; On the Zoogeographical Relationships of Africa, by Theodore Gill; Report of the Watson Trustees on the Award of the Watson Medal to David Gill, by Simon Newcomb; and A Human Bone from the Glacial Deposit at Trenton, N. J., by Frederic W. Putnam. The following papers were read by scientists not members of the Academy: West Indian Madreporarian Polyps, by J. E. Duerden, introduced by William K. Brooks; The Anatomy of *Nautilus pompilius*, by L. E. Griffin, introduced by William K. Brooks; On the Use of Electric Motors, of the Shunt Type, for Solving Linear Differential Equations of any Order with Variable Coefficients, and On the Pre-

diction of the Physical Properties of the Pure Metals, by Reginald A. Fessenden, introduced by Cleveland Abbe; and A Partial Explanation of Some of the Principal Ocean Tides, by Rollin A. Harris (by permission of Henry S. Pritchett), introduced by Cleveland Abbe. The meetings were held in the hall of Columbian University. The public business included the award of the Barnard medal to William Conrad Roentgen for his discovery of the X rays. This medal is given but once in five years, and then to the person who has made the most important contribution to physical science in that period. An important piece of business was the offer of Dr. Agassiz to give \$5,000 to the National Academy as the beginning of a building fund to erect a suitable home in Washington for the use of the Washington Academy of Sciences and local or affiliated societies, on condition that the land needed for such a building be either given by the Government or obtained from other sources; and, furthermore, that at least \$100,000 be raised for that purpose, the National Academy to have such privileges granted them as they might need in the way of use of the hall at the proper time for their meetings, and of suitable smaller rooms to be used for offices. Dr. Agassiz also offered to give \$1,000 to

serve as a beginning of a general fund, provided sufficient money is raised to make that fund \$20,000 as a minimum amount. Committees were appointed to take charge of raising both these funds and to solicit subscriptions for them. The new members elected were: James E. Keeler, director of the Lick Observatory, Mount Hamilton, Cal.; Henry F. Osborn, Da Costa Professor of Biology in Columbia University, New York city; Franz Boas, Professor of Anthropology in Columbia University and Assistant Curator in the American Museum of Natural History, New York city; and Samuel L. Penfield, Professor of Mineralogy in Sheffield Scientific School of Yale University, New Haven, Conn. An announcement was received from Dr. Wolcott Gibbs that his advancing years would compel him to resign the presidency of the Academy. Dr. Gibbs is one of the two surviving original members of the Academy, and is the foremost of American chemists. The following six members were elected to the council: Dr. John S. Billings, Dr. Henry P. Bowdich, Prof. George J. Brush, Prof. Wolcott Gibbs, Mr. Arnold Hague, and Prof. Simon Newcomb.

The scientific session was held in Providence, R. I., Nov. 13 and 14, 1900, when the following papers were read: Exhibition of Certain Novel Apparatus; A Wave Machine; An Expansion Lens; A Recording System of Two Degrees of Freedom; A Tube showing Colored Cloudy Condensation; On Stability of Vibration and on Vanishing Resonance; Demonstration of the Projection of One Grating by Another, and Hysteresis-like Phenomena in Torsional Magnetostriction and their Relation to Viscosity, by Carl Barus; Report on the Meeting of the Committee of the International Association of Academies, by James M. Crafts; Progressive Evolution of Characters in the Young Stages of Cephalopods, and Descriptive Method of Presenting the Phenomena of the Cycle of Evolution among Cephalopods, by Alpheus Hyatt; Note on the Energy of Recent Earthquakes, by Thomas C. Mendenhall; The Synthesis and Reactions of Sodium Acetate Ester, and their Relation to a New Interpretation of Chemical Metathesis, and On the Genesis of Matter, by Arthur Michael; Spectrum of Sodium in a Magnetic Field, and Progress in the Echelon Spectroscope, by Arthur A. Michelson; On the Development of the Pig, and Normal Plates Illustrating the Development of the Rabbit and the Dogfish, by Charles S. Minot; Distribution of Philogeny of Limulus, and Male Preponderance (Androrhopy) in Lepidopterous Insects, by Alpheus S. Packard; Stereographic Projection and Some of its Possibilities from a Graphical Standpoint, by Samuel L. Penfield; Recent Observations of the Planet Eros, and Screens Free from Relative Absorption, by Edward C. Pickering; The Porous Cup Voltmeter, and An Account of the Study of Growing Crystals by Instantaneous Microphotography, by Theodore W. Richards; A Report of the Spectrum Work carried on with the Aid of a Grant from the Bache Fund, and On the Explanation of Inertia and Gravitation by Means of Electrical Phenomena, by Henry A. Rowland; Investigations of Light and Electricity with the Aid of a Battery of Twenty Thousand Cells, by John Trowbridge; Folding and Faulting of Strata in Cordilleran Area, by Charles D. Walcott.

No public business was transacted at this meeting, although several important matters were introduced and submitted to committees to be reported upon at the spring session of the Academy. Biographical memoirs of the following deceased members were assigned for preparation: Frederick A. P. Barnard to Ogden N. Rood; C. H. F. Peters

to Charles A. Schott; Benjamin A. Gould to Seth C. Chandler; Francis A. Walker to John S. Billings; Othniel C. Marsh to Arnold Hague; Elliott Coues to Theodore N. Gill; Fairman Rogers to George F. Barker; and James E. Keeler to Charles S. Hastings.

NEBRASKA, a Western State, admitted to the Union March 1, 1867; area, 77,510 square miles. The population, according to each decennial census since admission, was 122,993 in 1870; 452,402 in 1880; 1,058,910 in 1890; and 1,068,539 in 1900. Capital, Lincoln.

Government.—The following were the State officers in 1899: Governor, William A. Poynter; Lieutenant Governor, E. A. Gilbert; Secretary of State, W. F. Porter; Treasurer, J. B. Meserve; Auditor, John F. Cornell; Attorney-General, C. J. Smythe; Adjutant General, P. H. Barry; Superintendent of Education, W. R. Jackson—all Populists except E. A. Gilbert, Silver Republican, and C. J. Smythe, Democrat; Land Commissioner, J. V. Wolfe; Chief Justice of the Supreme Court, T. L. Norval, Republican; Associate Justices, J. J. Sullivan and Silas A. Holcomb, Fusion.

The State officers are elected in November of the even-numbered years, for a term of two years. The Legislature meets in January of the odd-numbered years.

Finances.—The biennial report of the State Treasurer, covering the term from Nov. 30, 1898, to Nov. 30, 1900, presents these items: Total receipts, \$6,038,179.69; total disbursements, \$5,423,161.35; balance on hand Nov. 30, 1900, \$615,018.34. The Treasurer says: "The bonded indebtedness of the State having been entirely paid, there is now in the sinking fund \$56,165.23 which should be transferred to the general fund. No levy is being made from the sinking fund, but some is still due from back taxes. There is \$2,358 in the Penitentiary land fund. This money arises from rent of lands which were set aside for the building of the Penitentiary; small tracts of said lands have not been sold. In my last report we still had \$153,267.35 of State bonds. These have been entirely paid, making a total of \$468,267.35 paid and canceled during my two terms of office. We still have a floating indebtedness, which arises from the fact that we have a large amount of back taxes which have not been collected but against which warrants have been issued. The school fund holds \$1,165,762.12 of this amount; the balance (\$561,747.60) is held by individuals. The fact that the school fund has absorbed so much of this floating indebtedness has virtually put the State upon a cash basis as far as any advantage could be obtained by paying cash for all purchases made by the State for the running of the State institutions, and the loss to the State from paying the interest is reduced to the minimum, as the interest goes back to the State and is distributed to the taxpayers through the temporary school fund. The State has bonds and securities as an investment for its educational funds amounting to \$4,365,544.63. Since my last report we have bought county bonds to the amount of \$268,868.62. We have bought general fund and university fund warrants to the amount of \$1,238,288.26. Making a total investment in four years of \$2,245,356.79."

Education.—The educational fund for the school year ending July 9, 1900, had receipts (including balance) amounting to \$5,073,147.08, and a balance on hand at the close of the year of \$669,925.61. This balance was larger by \$7,178.26 than the balance left over the previous year. The number of teachers employed was 9,463—2,062 men and 7,401 women. The average monthly salary of the men was \$46.26; of the women, \$36.90.

The whole number of children of school age was 377,791; the whole number enrolled, 288,227; the average daily attendance, 181,874. The whole number of schoolhouses was 6,733; the number built within the year was 175. The average school tax was 15 mills. The total value of school property in the State was \$9,591,134.63.

The superintendent says in his report: "Many of our counties have shortened the period of institute from two or three weeks to one week, and instead of making the institute the means of cram-



CHARLES H. DIETRICH,
GOVERNOR OF NEBRASKA.

ming for examination, they have secured the best talent available and have sought to place before the teachers high ideals, to inspire them with a desire for growth, to elevate the professional standard, to quicken and energize the professional spirit, and to improve the organization, the instruction, and the management of schools. A few years ago the Teachers' Reading Circle work was on the decline, largely, perhaps, because of

the selection of the line of work; but the methods pursued in forwarding the work seemed not effective. For the past two years there has been a steady and healthful growth. The Pupils' Reading Circle has made a healthful growth in the past two years and is a potent factor in bringing to the pupils a line of wholesome reading that stimulates a taste for the best literature. In many of our schools the Pupils' Reading Circle has formed the foundation of a growing library. Special effort has been made in the last few years to create a sentiment in favor of libraries in our schools. Nebraska is perhaps the first to put out a library programme. We are gratified with the results. In many of our cities and in a number of our counties are to be found pedagogical libraries. Wherever these have been properly managed they have been a powerful agent in the upbuilding of the teachers. The teachers who make use of these county teachers' libraries are not content until the schools they teach are provided with good working libraries. In a number of counties almost every district has a library."

Irrigation.—The report of the State Engineer on the subject of irrigation for the years 1899 and 1900 fills a volume of 232 pages, illustrated with maps and views. The Engineer says: "The wisdom of the enactment of the irrigation law of 1895, erecting a State Board of Irrigation and giving it judicial powers, has been demonstrated by the satisfactory adjudication of nearly 1,000 claims growing out of appropriations attempted prior to the date of its approval. These adjudications have been made with but little expense to the appropriators, and have harmonized the adverse and conflicting interests of individuals and communities throughout the arid sections of the State. In States in which the adjudication of rights to the use of water has been left to the courts, endless litigation has been the invariable result. It has impoverished and discouraged irrigators and investors, and promoted discord between neighbors and jealousy and strife between

communities. During the past two years the board has been appealed to by appropriators on almost every stream in the State from which water was diverted for irrigation, to adjust controversies between appropriators and between irrigators and those using water for domestic purposes. The undersecretaries were instructed to give those desiring water for domestic purposes, including water for stock, the prior right in the distribution of water, and the controversies were amicably adjusted.

"By the enactment of irrigation laws, the State has encouraged the construction of canals and other works for irrigation which represent an investment of probably more than \$5,000,000. An important part of the work of the past year has been the examination and approval of applications for permits to appropriate water. Before this year the uncertainty concerning the validity and extent of claims inaugurated under the old law had made it impossible to act on these applications with safety. The opening of the new year found the old claims largely disposed of."

Fish.—The fund appropriated by the last Legislature for the use of the Fish Commissioners was but \$7,900. The superintendent says in his report: "There have been hatched and planted during the time I have been in charge, in round numbers, by actual count, 250,000 of fish actually raised at the hatcheries. The different varieties of fish distributed consists of the following: Wall-eyed pike, black bass, German carp, rainbow trout, croppies, striped perch, channel catfish, rock bass, besides about 15,000 gold fish for ornamental purposes. I find that my predecessor, according to his books, distributed since his last report 5,942,500. Making a total of 6,192,500 distributed since his last report. Of this number, about 95 per cent. were delivered to applicants, direct from the ear, and planted with scarcely any loss and no cost to the applicant and at little cost to the State. I think that this industry should be encouraged, for there is a growing demand for fish even to the gold or ornamental fish, there being a greater demand every year for this latter kind, both by private parties and by teachers in the public schools, which alone will pay the State the amount it costs."

Exhibits of fish and products of the hatcheries and of the manner of hatching fish were made at the State fair in Lincoln. The main exhibit of live fish was made in 20 aquariums each 8 to 10 feet long, including 1 large circular tank 12 feet across, in the center of the building, holding about 100 barrels, ornamented with all kinds of pond and water lilies, forming a very attractive feature of the exhibit.

Products.—By a report issued in November, it was estimated that the farmers of Nebraska realized more than \$105,000,000 for their corn, wheat, oats, and rye crops. That is \$10 for every man, woman, and child in the State.

Experiments made with the raising of small fruits show that this can be done with large return where a good system of irrigation is in operation.

An experiment was made in the culture of sugar beets by convict labor on 30 acres. The expenses amounted to \$338 and the profits were \$363.71. In the expenses the wages of the convicts were rated at 50 cents a day.

Banks.—There are only 8 savings banks in the State. At the date of the last report, August, 1900, they held deposits amounting to \$674,498.18, an increase of \$45,919.93 since Dec. 9, 1899. The deposits of savings banks are included in the total deposits in State banks as reported by the bank-

ing department. The sum of the deposits in all the banks of the State was \$25,256,035.30.

There were 60 building and loan associations in the State in 1900, with assets amounting to \$3,697,356.06.

Political.—The State convention of the Democratic party was held in Lincoln, March 19. The platform included these declarations:

"We, the Democrats of Nebraska, in convention assembled, do hereby reaffirm and indorse, in whole and in part, in letter and in spirit, the platform adopted by the Democratic National Convention held in Chicago in 1896.

"We favor amendments to the Federal Constitution specially authorizing an income tax and providing for the election of United States Senators by a direct vote of the people.

"We are in favor of the immediate construction and fortification of the Nicaraguan Canal by the United States.

"We pledge ourselves to wage an unceasing warfare against all the trusts—the money trusts, the industrial trust, and the international land-grabbing trust.

"Instead of a system which would chain our nation to the gold standard and compel it to participate in all the disturbances which come to European nations, we demand an American financial system, made by the American people for themselves, to be secured by the immediate restoration of the free and unlimited coinage of gold and silver at the present legal ratio of 16 to 1, without waiting for the aid or consent of any other nation.

"We condemn the Porto Rico tariff bill recently passed by a Republican House of Representatives, as a bold and open violation of the nation's organic law, and a flagrant breach of good faith.

"The Filipinos can not be citizens without endangering our civilization; they can not be subjects without endangering our form of government; and as we are not willing to surrender our civilization or to convert a republic into an empire, we favor an immediate declaration of the nation's purpose to give to the Filipinos, first, a stable form of government; second, independence; and third, protection from outside interference, as it has for nearly a century given protection to the republics of Central America.

"We sympathize with the Boers in their heroic efforts to preserve their national integrity."

At the same time and place the Populists held their State convention. The split in their ranks was continued, and the bolters were excluded from the convention.

The Silver Republicans also held their State convention at the same time and place.

A fusion ticket was arranged for the Democrats and Populists, in July, the following being the nominations for State officers: For Governor, W. A. Poynter, Populist; Lieutenant Governor, E. A. Gilbert, Silver Republican; Attorney-General, W. D. Oldham, Democrat; Secretary of State, C. V. Svoboda, Populist; Treasurer, S. B. Howard, Populist; Auditor, H. Theo. Griess, Populist.

In July the Prohibitionists, in State convention, nominated a full State ticket.

July 20 the bolting Populists—mid-rovers—met at Grand Island. They nominated State officers and put forth a platform, which contained these declarations:

"The hopelessness of real reform through either of the two old parties, which through equality of corruption have both become absolutely inoperative for the public good through the desertion of principles to outside help for greed of office, our party has been temporarily cut in

twain, but we, the Populists of Nebraska, here and now vow our unfaltering opposition to any further fusion with either the Democratic or Republican parties. We arraign Goebelized Democracy as the Democratic Mark Hanna, and denounce its wholesale disfranchisement of white and black citizens of the South as government without consent and a direful menace to our free institutions, and tending wholly to imperialistic despotism.

"We demand an irredeemable dollar, good for all debts, public and private, issued direct to the people by the Government, but until such legislation is secured we are in favor of the free and unlimited coinage of both gold and silver at the ratio of 16 to 1.

"We demand State or municipal ownership of waterworks, street railroads, telephones, and electric-light service at cost to the people."

The State Republican Convention was held in May. The significant portions of the platform were these:

"We, the Republicans of Nebraska, are unlike our political adversaries, who in the late convention held high carnival over the imaginary evils threatening our country, and adopted platforms which are a standing protest against its prosperity, grandeur, and glory.

"We point with pride to the remodeling of our tariff laws, which has increased our revenues and not impeded trade; which has opened the doors of mills and factories to the millions of American skilled mechanics, and is returning to them the higher wages that are the just recompense for their toil.

"We indorse the legislation that has strengthened our financial system and firmly established the gold standard, and made the American dollars so safe and secure that they are kept busy chasing one another around the endless circle of business, too good to go into hiding and too patriotic to steal abroad. In answer to the cry for the free and unlimited coinage of silver and the claim that there is not gold enough as a basis upon which to do the business of the country the United States Treasury puts in evidence the \$120,000,000 in gold that has come to it within a year, and the \$413,000,000 in gold now held within its vaults, and the unexampled prosperity and measureless and limitless and countless financial transactions thus sustained without seeming effort.

"While we are unalterably opposed to imperialism and militarism as practiced by European nations, we are willing to accept all the legitimate results of honorable warfare, and to assume the burdens of governing and holding acquired territory.

"We earnestly recommend that Congress devote some of the money now annually expended in large quantities for river and harbor improvements to reclaiming the arid lands of the West."

The following State ticket was nominated: For Governor, Charles H. Dietrich; Lieutenant Governor, E. P. Savage; Secretary of State, George W. Marsh; Treasurer, William Stueffer; Auditor, Charles Weston; Attorney-General, F. N. Prout; Land Commissioner, George D. Follmer; Superintendent, W. K. Fowler.

At the election in November the Republican State ticket received 113,879 votes; the fusion ticket, 113,018. The vote for presidential electors resulted in 121,835 for McKinley and 114,013 for Bryan.

NETHERLANDS, a monarchy in western Europe. The legislative authority is vested in the States General, consisting of a First Chamber,

containing 50 members, elected by the provincial councils for nine years, and a Second Chamber, containing 100 members, elected for four years by the direct votes of all citizens who pay any direct taxes or are legally qualified for any profession or employment or have money in the savings bank, or earn 275 guilders a year, or own boats, or occupy separate dwellings. The reigning sovereign is Queen Willemina, born Aug. 31, 1880, daughter of Willem III by his marriage with Princess Emma of Waldeck. The Queen succeeded to the throne at the death of her father on Nov. 23, 1890, and assumed the royal authority on Sept. 6, 1898, the Queen Dowager having acted as regent during her minority.

The Council of Ministers at the beginning of 1900 was composed as follows: President of the Council and Minister of Foreign Affairs, Dr. W. H. de Beaufort; Minister of the Interior, Dr. H. Goeman Borgesius; Minister of Finance, Dr. N. G. Pierson; Minister of Justice, Dr. P. W. A. Cort van der Linden; Minister of the Colonies, J. T. Cremer; Minister of Marine, Vice-Admiral J. A. Roell, succeeding J. C. Jansen; Minister of War, Lieut.-Gen. K. Eland; Minister of Waterstaat, Commerce, and Industry, C. Lely.

Area and Population.—The area of the Netherlands, or Holland, is 12,648 square miles. The population on Dec. 31, 1898, was estimated at 5,074,632, being 401 to the square mile, divided into 2,513,267 males and 2,561,365 females. The urban population was 34.3 per cent. of the total, the rural population 65.7 per cent. The number of marriages in 1898 was 36,813; of living births, 160,765; of deaths, 85,813; excess of births, 74,952. The net emigration in 1898 was 851—viz., 781 to the United States and 70 to South Africa. Of the emigrants 439 were men, 226 women, and 186 children. The number of foreign and Dutch emigrants who took passage from the ports of Holland was 14,119. The population of the principal towns at the end of 1898 was: Amsterdam, 512,953; Rotterdam, 309,309; The Hague, 199,285; Utrecht, 100,066.

Education has not hitherto been made compulsory in the Netherlands, nor is it everywhere free. By the act of 1889 the Government grants subsidies to private religious schools, besides supporting the secular public schools jointly with the communes, paying part of the salaries of teachers and 25 per cent. of the cost of all new schools. There were 3,091 public elementary schools in 1898, with 15,696 teachers and 405,054 pupils; 1,434 private elementary schools, with 7,146 teachers and 224,361 pupils; 139 public infant schools, with about 825 teachers and 25,543 pupils; 904 private infant schools, with about 2,660 teachers and 86,078 pupils; 123 schools for the working classes, with 1,166 teachers and 16,457 pupils; 73 intermediate schools, with 973 teachers and 9,266 pupils; 29 classical schools, with 428 teachers and 2,370 pupils; and 11 schools of navigation, with 68 teachers and 877 pupils. The 4 state universities had 165 professors and 2,822 students, and the polytechnicum 30 professors and 581 students. There are also agricultural and horticultural schools, a school for the East Indian civil service, several military schools, an academy of art, a royal school of music, and normal schools for teachers. The expenditure of the Government in education in 1898 was 9,895,992 guilders, that of the communes 10,997,092 guilders. The proportion of totally illiterate conscripts in 1898 was 3.6 per cent. A bill introducing compulsory school attendance was presented by the Minister of Education in the spring session of 1900. The Second Chamber by

a single vote defeated the proposal to make continuation beyond the rudiments obligatory, although it agreed by the same narrow majority to impose on the communes the duty of establishing and maintaining continuation schools.

Finances.—The ordinary revenue for 1898 was 138,365,846 guilders, and the extraordinary revenue from loans and other sources was 5,755,139 guilders; total revenue, 144,120,985 guilders. The total expenditure was 150,505,462 guilders, of which 37,747,308 guilders went for defense, 33,459,451 guilders for debt, 19,970,410 guilders for public works, and 59,328,293 guilders for the general expenses of government. The estimate of revenue for 1899 was 140,796,900 guilders, and of expenditure 152,613,959 guilders. For 1900 the budget estimate of revenue was 144,723,185 guilders, of which the land tax gave 12,635,000 guilders; personal tax, 8,600,000 guilders; tax on capital, 7,100,000 guilders; tax on incomes from trades and professions, 5,675,000 guilders; excise duties, 47,440,000 guilders; indirect taxes, 21,065,000 guilders; import duties, 8,917,250 guilders; tax on gold and silver, 300,900 guilders; domains, 1,970,000 guilders; post office, 9,910,000 guilders; telegraphs, 2,036,000 guilders; lottery, 651,000 guilders; shooting and fishing licenses, 130,000 guilders; pilot dues, 2,000,000 guilders; mining dues, 7,705 guilders; state railroads, 4,306,190 guilders; share of the East Indies in the interest and sinking fund of the debt, 3,848,000 guilders; miscellaneous revenues, 8,131,140 guilders. The total expenditure for 1900 was estimated in the budget at 151,260,244 guilders, of which the civil list took 800,000 guilders; States General and Royal Cabinet, 680,992 guilders; Ministry of Foreign Affairs, 855,140 guilders; Ministry of the Interior, 15,474,449 guilders; Ministry of Marine, 15,959,263 guilders; Ministry of Finance, 25,283,592 guilders; Ministry of War, 22,584,783 guilders; Ministry of Public Works, 27,421,266 guilders; Ministry of the Colonies, 1,206,604 guilders; public debt, 35,118,640 guilders; contingent expenses, 50,000 guilders. Of the total revenue of 1898 direct taxation produced 33,014,530 guilders, excise 46,915,485 guilders, indirect taxes 19,581,873 guilders, and customs 8,787,071 guilders; together 24.77 per cent. of the whole, and respectively 6.55, 9.31, 3.89, and 1.74 per cent. The customs duties, framed for revenue only, do not exceed 5 per cent. on most dutiable articles, and on imports used in the industries they are not over 2.5 per cent., if any duties at all are levied. The budget for 1901 shows a deficit of 5,250,000 guilders, 2,000,000 guilders of which are due to increased expenditure on the army and navy and on education, and the remainder to expenditure on extending public works.

The public debt in 1900 amounted to 1,160,246,800 guilders, of which 624,996,600 guilders are 2.5-per-cent. funded debt, 520,250,200 guilders 3-per-cent. loans of 1895, 1898, and 1899, and 15,000,000 guilders uncovered papered money. The 5- and 6-per-cent. debts of expropriated railroads were redeemed in 1899. There is a floating debt requiring about 300,000 florins a year to be paid in interest, and 296,719 florins are paid for annuities, making with the sinking fund of 3,256,000 guilders a total annual debt charge of 35,118,640 guilders, the interest on the funded debt being 31,265,921 guilders. The total value of real property in the Netherlands is estimated at 3,696,000,000 guilders, and personal property at 6,864,000,000 guilders, making the national wealth 10,560,000,000 guilders.

The Army.—Conscription has been partly introduced into the Netherlands, though the main

stock of the army is still formed by voluntary enlistment. The conscripts, about 11,000 in number, must serve a year with the colors, and during the next four years they are called into camp for six weeks annually. There is a militia, called the *schutterij*, of which all Dutchmen must be active members for five years from the age of twenty-five. The regular army on June 1, 1898, numbered 1,943 officers and 25,753 noncommissioned officers and privates. There are 9 regiments of infantry, with the guards, 3 cavalry regiments, 3 regiments of field artillery, 1 corps of horse artillery, 4 regiments of fortress artillery, 1 battalion of sappers and miners, 1 corps of pontooners, and 1 corps of torpedoists.

The Navy.—The obsolete turret ships *Koning der Nederlanden* and *Prinz Hendrik* have been retired, and 13 old monitors, 6 unprotected cruisers, and 30 river gunboats are no longer classed as effective. The new armorclads are small, being intended only for coast defense, and they are supplemented by a formidable torpedo flotilla and by monitors of modern type and protected cruisers for the defense of the Eastern possessions as well as the coast of Holland. The small coast-defense turret ship *Reinier Claeszen*, launched in 1891, of 2,490 tons, carries 1 8-inch and 1 7-inch gun and 4 quick firers, has 10½ inches of side armor, and can steam only 12½ knots. The armored cruiser *Koningen Willemina der Nederlanden*, launched in 1892, of 4,600 tons, with 11½ inches of armor at the water line, is armed with 1 11-inch and 1 8-inch breech-loaders, and 2 6-inch, 4 3-inch, and 11 small quick firers. This vessel is being refitted with the Yarrow water-tube boiler and with new engines. The armored cruisers *Piet Hein*, *Evertsen*, and *Kortenaar*, built in 1894, and designed for coast defense merely, have 10½ inches of armor, a displacement of 3,520 tons, and a battery of 3 8-inch, 2 6-inch, and 12 quick-firing guns, and can steam 16 knots. An improvement on this type is the *Koningen Regenten*, a barbette ship capable of sea maneuvers, launched in 1899, having 10-inch plates on the sides, an armament of 2 9.4-inch guns, with a quick-firing battery of 4 6-inch, 8 3-inch, and numerous small guns. A sister ship to this one is building. The new protected cruisers of the Dutch navy have been called by naval men the finest examples of their class afloat. The *Holland*, *Friesland*, and *Zeeland*, launched in 1896, of 3,950 tons, armed only with quick-firing guns, 2 6-inch, 6 4.7-inch, 4 3-inch, and 12 smaller ones, have the Yarrow boilers, like all the later Dutch ships, and with engines of 10,500-horse power and over steam 20 knots easily. The *Gelderland*, *Nordbrabant*, and *Utrecht*, launched in 1898, having a displacement of 50 tons more, with the same armament as the others, are intended to make 23 knots an hour. Three monitors of 1,500 and 3 of 1,400 tons are being constructed, the former to have an armament of 2 8-inch breech-loading and 4 3-inch quick-firing guns, the latter 1 8-inch gun and a 4.7-inch quick firer in addition to the others. Thirteen first-class and 4 third-class torpedo boats are being added to the flotilla, which consists already of 25 third-class boats of 30 to 45 tons, and 15 of the second class, of 83 to 90 tons.

Commerce and Production.—Of the total area of Holland 895,136 hectares were reported in 1897 as uncultivated—heath land covered with water, marsh, and land occupied by roads, towns, or buildings. The cultivated area was 2,360,062 hectares, of which 864,137 were under tillage, 61,517 gardens and orchards, 1,185,568 pasture, and 248,840 forest. The area sown to wheat in 1897

was 62,199 hectares; rye, 213,448; barley, 36,320; oats, 134,133; potatoes, 151,212; buckwheat, 31,241; beans, 38,595; peas, 27,262; rape seed, 3,982; flax, 10,433; beet root, 38,508; tobacco, 784; madder, 177. The imports of wheat in 1898 were 136,159,000 guilders in value, and exports 106,720,000 guilders; imports of wheat and rye flour 54,828,000 guilders, and exports 11,060,000 guilders; imports of rye 85,997,000 guilders, and exports 41,125,000 guilders; imports of barley 31,817,000 guilders, and exports 21,415,000 guilders; imports of oats 19,228,000 guilders, and exports 16,522,000 guilders; imports of potatoes 549,000, and exports 877,000 guilders; imports of potato starch 4,810,000 guilders, and exports 15,590,000 guilders; imports of buckwheat 3,385,000 guilders, and exports 863,000 guilders; imports of flax 1,610,000 guilders, and exports 13,947,000 guilders; imports of beets 131,000 guilders, and exports 1,876,000 guilders; imports of bulbs and plants 520,000 guilders, and exports 6,064,000 guilders; imports of vegetables 2,258,000 guilders, and exports 37,277,000 guilders. The value of coal mined in 1898 was 436,208 guilders. There were 545 distilleries, 10 sugar refineries, 31 beet-sugar factories, 45 salt works, 91 vinegar factories, and 494 breweries. The number of steam engines in a total of 3,573 manufactories was 4,280. The number of fishing vessels was 5,385, with crews numbering 18,709. The value of the herring catch was 6,370,532 guilders.

The total value of imports for domestic consumption in 1898 was 1,795,000,000 guilders, and the value of exports of domestic produce and manufacture was 1,516,000,000 guilders. The imports of iron and steel and their manufactures were of the value of 163,800,000 guilders, and exports 105,904,000 guilders; imports of textile materials and manufactures 120,453,000 guilders, and exports 94,134,000 guilders; imports of cereals and flour 328,029,000 guilders, and exports 196,842,000 guilders; imports of coal 51,456,000 guilders, and exports 6,160,000 guilders; imports of rice 53,981,000 guilders, and exports 23,971,000 guilders; imports of mineral oil 11,337,000 guilders; imports of coffee 48,822,000 guilders, and exports 27,124,000 guilders; imports of butter 1,479,000 guilders, and exports 19,948,000 guilders; imports of margarine 21,805,000 guilders, and exports 44,362,000 guilders; imports of sugar 24,107,000 guilders, and exports 55,096,000 guilders; imports of timber 50,355,000 guilders, and exports 39,776,000 guilders; imports of hides and skins 26,684,000 guilders, and exports 29,752,000 guilders; imports of indigo 7,813,000 guilders, and exports 5,877,000 guilders; exports of cheese 13,804,000 guilders; imports of copper 74,270,000 guilders, and exports 75,743,000 guilders; imports of paper 5,172,000 guilders, and exports 34,247,000 guilders; imports of animal fats 23,870,000 guilders, and exports 10,162,000 guilders; imports of saltpeter 25,435,000 guilders, and exports 22,776,000 guilders; imports of zinc 6,542,000 guilders, and exports 4,051,000 guilders; imports of tin 21,834,000 guilders, and exports 16,497,000 guilders; imports of paints 14,085,000 guilders, and exports 12,643,000 guilders; imports of flax 1,610,000 guilders, and exports 13,947,000 guilders; imports of oil seeds 29,407,000 guilders, and exports 12,997,000 guilders; imports of tobacco, 9,804,000 guilders, and exports 5,881,000 guilders; imports of gold and silver 32,657,000 guilders, and exports 2,370,000 guilders. Of the total value of imports in 1898 the sum representing articles of food is 460,119,000 guilders, and of exports 465,633,000 guilders; raw materials were imported of the value of 298,992,000 guilders, and the exports

were 260,589,000 guilders; manufactured articles among the imports amounted to 212,811,000 guilders; and among the exports to 202,545,000 guilders; and of miscellaneous imports the value was 308,060,000 guilders, and of exports 308,152,000 guilders. The values of the trade in 1898 with the principal foreign countries are given in guilders in the following table:

COUNTRIES.	Imports.	Exports.
Prussia.....	313,300,000	787,600,000
Great Britain.....	269,000,000	337,800,000
Belgium.....	209,400,000	160,900,000
Dutch East Indies.....	260,800,000	43,700,000
United States.....	279,800,000	48,500,000
Russia.....	164,100,000	7,500,000
France.....	21,500,000	32,200,000
British India.....	52,600,000	.....
Hamburg.....	26,200,000	25,000,000
Italy.....	.....	8,800,000

Railroads and Telegraphs.—The Government owned 961 miles of railroads in 1898, which had a traffic of 6,199,000 metric tons and carried 10,828,000 passengers, and earned 22,044,000 guilders and paid for expenses 17,509,000 guilders; private companies owned 761 miles, which had a traffic of 3,833,000 metric tons of freight and 15,206,000 passengers, earning 17,376,000 guilders and costing 13,053,000 guilders for expenses. The capital cost of the Government lines was 270,509,000 guilders. The canals have a total length of 2,943 miles, and other navigable waters 3,000 miles. There were 818 miles of tramways in 1897. The length of the Government telegraph lines was 3,671 miles, with 13,017 miles of wire; messages transmitted in 1898, 4,957,691.

Politics and Legislation.—The Netherlands Government sent war ships to South African waters, as many Dutch citizens and Dutch vessels were at Lourenço Marques, and when the troubles broke out in China ships were dispatched thither. The finances showed considerable elasticity in 1900, but the compulsory education bill made new demands on the revenue, and the Minister of Finance had to look about for fresh resources. In the session that began on Sept. 18 several measures were introduced to facilitate the moral and material development of the Dutch East Indies, where the financial conditions were equally favorable, particularly on account of the progress made in the pacification of northern Sumatra, although it was still necessary at times to bring the troops and the fleet into action. New measures of internal interest dealt with labor contracts, the accident insurance bill, which was already before the Chambers in the former session, and the working of coal mines in Limburg by the Government.

The Dutch East Indies.—The Dutch possessions in the East Indies have a total area estimated at 736,400 square miles, and about 34,000,000 population. The territories are divided into the lands under direct government, vassal lands, and confederated lands. The Governor General, at present W. Rooseboom, appointed June 1, 1899, has power to make laws and regulations subject to the constitutional principles laid down in 1854, except in matters specially reserved for the legislative action of the States General. The States General in 1798 assumed the sovereign powers which the Dutch East India Company had exercised for two centuries, and in 1832 Gen. Johannes Graaf van den Bosch introduced the culture system into Java, under which Government officials supervise the labor of the natives, making them produce, in addition to their own food supplies, large quantities of colonial products,

such as coffee, sugar, pepper, and indigo, which the Government sells abroad. The Government plantations of pepper, indigo, tea, tobacco, and sugar cane have been given up as the result of the progress of the natives in intelligence and the desire for liberty and of the growth of liberal ideas in Holland. Forced labor is now required only for the cultivation of coffee, which is sold by the Government, most of it in Europe, but a part in Java. The island of Java, with Maduro, is distinguished from the outposts—Sumatra, Borneo, Riau-Lingga, Banca, Billiton, Celebes, Molucca, Sunda Islands, and Dutch New Guinea—in which, excepting on the west coast of Sumatra and the province of Menado in Celebes, the culture system has never been established.

The area of Java and Maduro is 50,554 square miles, with 26,125,053 inhabitants in 1897. Sumatra has 1,353,315 inhabitants on 31,640 square miles of the west coast, 137,501 on 11,284 square miles in Lampong, 692,317 on 53,497 square miles in Palembang, and the population of the east coast, 35,312 square miles, is estimated at 335,432, and of Benkulen, 9,399 square miles, at 158,767. The Riau-Lingga Archipelago, area 16,301 square miles, has approximately 107,861 inhabitants; Banca, area 4,440 square miles, has 93,600; Billiton, area 1,863 square miles, 41,558; western Borneo, 55,825 square miles, approximately 370,775; southern and eastern Borneo, 156,912 square miles, 809,803 as roughly estimated; Celebes, an estimated population of 1,448,722 on 49,390 square miles in the province of Celebes and 549,138 on 22,080 square miles in Menado; Molucca Islands, area 43,864 square miles, population approximately 399,208; Timor Archipelago, area 17,698 square miles, population approximately 119,239; Bali and Lombok, area 4,065 square miles, population 1,044,757, as estimated; New Guinea to 141° of east longitude, area 151,789 square miles, about 200,000 population. The number of Europeans and persons assimilated to them living in the East Indies at the beginning of 1897 was 35,489 males and 27,826 females, of whom 33,055 males and 27,222 females were of Dutch race, and 25,351 males and 23,648 females were Dutch born in the East Indies. Of the rest 1,192 were Germans, 318 English, 300 French, 292 Belgians, 184 Swiss, and 168 Austrians, Armenians, and others. There are about 460,000 Chinese, 24,000 Arabs, and 27,000 other Asiatics. Europeans and persons assimilated to them are governed according to European law, natives according to their own laws and customs.

The revenue for the financial year 1899 was 133,255,514 guilders, and expenditure 145,050,826 guilders, leaving a deficit of 11,795,312 guilders to add to the deficits of 17,013,300 guilders in 1898, 18,100,542 guilders in 1897, and 10,618,549 guilders in 1896, and others in previous years since the war in Acheen began. Taxation has been increased in proportion as the revenue from sales of products has fallen off. Of the revenue for 1899 taxes formed 42.6 per cent.; revenue from the opium, salt, and other monopolies, 23.3 per cent.; sales of coffee, cinchona, tin, and coal, 18.7 per cent.; miscellaneous receipts, 15.4 per cent. For 1900 the budget estimate of revenue was 141,251,247 guilders, of which 22,750,308 guilders are receipts in the Netherlands and 119,180,700 guilders receipts in the colonies; estimated expenditure, 145,251,247 guilders—28,088,324 guilders in the Netherlands and 117,162,923 guilders in the colonies; leaving an estimated deficit of 3,320,239 guilders. The receipts in the Netherlands were 3,774,515 guilders from sales of Government coffee, 178,200 guilders from cinchona, 14,159,959

guilders from tin, 2,150,000 guilders as the share of the Government in profits of the Billiton Company, 935,000 guilders from railroads, and 1,552,634 guilders from other sources. Receipts in the colonies were 18,815,000 guilders from sales of opium, 17,939,000 guilders from import, export, and excise duties, 20,130,300 guilders of land revenue, 11,770,000 guilders from railroads, 6,411,300 guilders from sales of coffee, 9,269,000 guilders from sales of salt, and 34,846,000 guilders from all other sources. The army and navy expenditure amounts to about a third of the whole, and administrative expenses to about a third.

The strength of the army in the beginning of 1898 was 1,421 officers and 41,157 noncommissioned officers and privates. European and native soldiers are mingled in the same regiments and battalions, though in separate companies, and the cavalry is composed of both, while in the artillery the gunners are Europeans and the riders natives. Soldiers of the army of the Netherlands, with the permission of their officers, can receive their discharges in order to enlist in the colonial army, and the rate of pay is high enough to attract others, both Dutchmen and foreigners, in Europe besides Europeans in the East Indies and half-castes, who stand on an equal footing with Europeans. Among the total number of enlisted men in 1897 were 15,839 Europeans, 52 Africans, 3,934 Amboinese, and 21,332 natives. The number of horses was 1,478. In the native companies half the noncommissioned officers must be Europeans, and all the commissioned officers are who are in active service, commissions being given to the native nobility only as honorary titles. Each infantry battalion is composed of four companies, one or two of them European companies. The naval force is in part provided and maintained by the Netherlands Government. The Indian navy contains 21 ships, manned by 1,450 Europeans and 750 natives; the auxiliary squadron from the Netherlands of 4 ships, manned by 1,000 Europeans and 200 natives.

The soil is mostly Government property in Java, excepting in the western section, where Europeans and Chinese have acquired private estates. The private landowners as well as the Government can require the natives on their land to give one day's labor every week by the old law, but the Government in 1882 commuted the right on most of its lands into a tax of 1 guilder per annum. The laborers are bound, however, by strict labor laws, which are thoroughly enforced by the officials, both European and native. There were 4,899,924 acres under rice in 1897. 4,019,092 acres under corn, arachis, cotton, and various crops. 229,894 acres under sugar cane, 240,308 acres under tobacco, 51,707 acres under indigo; total cultivated area, 9,440,925 acres. During 1897 the Government leased for seventy-five years 845,171 acres of waste lands to 729 European companies and individuals, 31,927 acres to 45 Chinamen, and 3,041 acres to 6 natives. On such lands and on lands owned by Europeans or Chinese or leased from native owners the sugar crop is grown, the Government having given up the culture in 1891. There are 2,066,062 acres now the property of Europeans, 645,417 acres belonging to Chinese owners, and 33,087 acres owned by other Orientals. The quantity of sugar produced in 1897 was 12,206,052 pounds. The yield of coffee was 68,338,400 pounds raised by forced labor on Government land, 12,947,200 pound raised by natives for themselves. 70,223,600 pounds grown on leased lands, and 4,994,666 pounds grown on private

estates; total, 150,503,866 pounds. The production of cinchona was 325,887 kilogrammes on Government land, 2,910,718 kilogrammes on leased land, and 116,497 kilogrammes on private plantations. The production of tobacco was 17,112,831 kilogrammes on 106 plantations in Sumatra, and 16,354,372 kilogrammes on 87 plantations in Java. Of tea, 4,205,576 kilogrammes were produced on 86 plantations; of indigo, 802,402 kilogrammes on 138 plantations. Tin is mined by the Government in Banca and by companies in Billiton and Riau. The production has increased from 12,200 tons in 1892 to 15,600 tons in 1897 and 17,569 tons in 1898. The output of coal, which is mined in Java, Sumatra, and Borneo, was 28,897 tons in 1897; of mineral oil, 2,429,588 hectolitres. There were 2,643,000 buffaloes and 2,572,000 oxen in Java in the beginning of 1896, and the number of horses was 485,500.

The Government imports were 5,172,145 guilders of merchandise; the private imports, 167,296,526 guilders of merchandise and 9,236,877 guilders of specie; total imports, 181,705,548 guilders. The Government exported 18,305,874 guilders' worth of merchandise in 1897, and private merchants 191,169,334 guilders of merchandise and 939,070 guilders of specie; total exports, 210,414,278. Half the rice exports go to Borneo and China, and the rest to the mother country, whither are shipped nearly 80 per cent. of all other exports, including coffee, tin, tobacco, tea, indigo, sugar, and cinchona.

There were 3,887 steamers, of 1,479,720 tons, and 206 sailing vessels, of 132,039 tons, entered at the Dutch East Indian ports during 1897. The length of the railroads, both Government and private, in the beginning of 1898 was 1,200 miles; receipts in 1897 were 15,237,000 guilders. There were 6,833 miles of telegraph lines, over which 655,190 messages passed in 1897. In that year telephone communication was established between the cities of Batavia, Samarang, and Sourabaya.

Guiana.—Dutch Guiana, or Surinam, is administered by a Governor, who is assisted by an Executive Council of official and private members, all appointed by him, and the Colonial States, partly nominated and partly elective. The area is 46,060 square miles; population, 65,168, nearly half of them living in Paramaribo, the capital. The revenue raised in the colony from import, export, and excise duties, taxes on land and houses, personal taxes, and other sources amounted to 2,174,000 guilders, which was supplemented by a subvention of 177,000 guilders from the Netherlands Government. The total expenditure was 2,351,000 guilders. The militia numbers 26 officers and 356 men, and there is a coast guard of 66 officers and 1,294 men, and a garrison of 22 officers and 320 European troops. The production of sugar was 11,624,974 kilogrammes in 1897; of cacao, 3,424,513 kilogrammes; of bananas, 562,949 bunches; of coffee, 281,876 kilogrammes; of rum, 1,000,741 litres; of molasses, 1,370,110 litres. There were 330 concessions for gold-mining, and gold was exported in 1897 to the amount of 1,178,070 guilders, the previous exports since the mines were first opened in 1876 having been 21,872,450 guilders. Several companies have begun crushing quartz. The total value of imports in 1897 was 5,294,424 guilders; exports, 5,241,671 guilders. During the year 248 vessels, of 107,153 tons, were entered, and 253, of 108,988 tons, cleared.

NEVADA, a Western State, admitted to the Union Oct. 31, 1864; area, 110,700 square miles. The population, according to each decennial cen-

us since admission, was 42,491 in 1870; 62,266 in 1880; 45,761 in 1890; and 42,335 in 1900. Capital, Carson City.

Government.—The following were the State officers in 1900: Governor, Reinhold Sadler; Lieutenant Governor, James R. Judge; Secretary of State, Eugene Howell; Treasurer, D. M. Ryan; Comptroller, Samuel P. Davis; Attorney-General, William D. Jones; Surveyor General, Edward D. Kelley; Superintendent of Instruction, Orvis Ring; Adjutant General, J. R. Judge, *ex officio*; Chief Justice of the Supreme Court, M. S. Bonfield; Associate Justices, W. A. Massey, C. H. Belknap; Clerk, Eugene Howell, *ex officio*. All are of the Silver party except Superintendent Ring, who is a Republican.

State officers are elected in November, once in four years. The next State election will be in 1902. An associate justice of the Supreme Court is elected in the alternate even-numbered years.

The Legislature meets biennially, in January of the odd-numbered years.

Population.—The population of the several counties, by the census of 1900, was as follows: Churchill, 830; Douglas, 1,534; Elko, 5,688; Esmeralda, 1,972; Eureka, 1,954; Humboldt, 4,463; Lander, 1,534; Lincoln, 3,284; Lyon, 2,268; Nye, 1,140; Ormsby, 2,893; Storey, 3,673; Washoe, 9,141; White Pine, 1,961.

Finances.—The condition of the treasury, Nov. 16, was given thus: Coin, \$129,994.52; paid coin vouchers not returned to Comptroller, \$16,381.20. The State fund securities were: Irredeemable State school bonds, \$380,000; Nevada State bonds, \$262,900; United States bonds, \$785,000; total, \$1,574,275.72. In February the bond commissioners redeemed \$82,771.20 worth of bonds. The Nevada war claims against the Government amount to \$462,000. The annual report of the Treasurer showed the finances to be in a satisfactory condition.

Education.—The school population is 9,026. The semiannual apportionment was \$65,886.37.

The appropriation for the Nevada Indian school provides for 200 pupils. This increases the support more than \$8,000 over that of any previous year. In addition, \$3,000 is given for a shop building and \$3,000 for general repairs.

The experiment station at the university comprises 60 acres, with stables, cottage, and tool house. The botanical department has received a collection of 600 species of grasses from Prof. T. L. Scribner. A university extension class is receiving instruction in mining engineering. The studies will include mineralogy, chemistry, mathematics, mechanical and free-hand drawing, and assaying.

The school at the State Orphans' Home had 68 pupils registered for the fall term.

Land.—There are 520,000 acres of land to which the State has title. In 1899 the land office issued 991 contracts, drawing \$8,059.35 on a principal of \$124,322.43. By failure to meet the interest due, 275,093.38 acres became forfeit to the State in January. The amount of United States land in the State unappropriated is 61,326,740 acres.

Products.—The number of cattle in the State is estimated at 20,000, and of sheep from 4,000,000 to 5,000,000. The wool clip was estimated at 7 pounds a head.

A lost tin mine in Churchill County was recently rediscovered, and samples of ore that were sent for a test to Swansea, Wales, gave returns of nearly 18 per cent. The vein is said to be 4 feet wide.

A writer in the Mining and Scientific Press says that in the heart of the Carson desert, about 2 miles east of Ragtown, there are two strange lakes

whose waters are rich in soda. The lakes occupy probably the shallow craters of extinct volcanoes. "Driving through the soft, volcanic ashes which here cover the ground, we ascend a gentle slope for a little distance, and suddenly find ourselves on the brink of a depression, perhaps 75 feet deep. In the center is a pond of yellowish water, and around the margin are sheds containing piles of white, crystallized soda. This depression is not more than one fourth of a mile across. Continuing a little distance in a northeasterly direction, the larger crater is soon seen. It is fully 1 mile across and more than 100 feet deep. It is occupied by a beautiful sheet of water, set in a rim as perfect and symmetrical as though it had been shaped by hand. The water is shallow and intensely alkaline, although around the margin there are springs which are fit to drink."

The gold product in 1899 was estimated at \$2,742,000; by another estimate, \$2,412,000. The output of silver was estimated at \$1,254,800. The amount of copper, lead, and antimony was greater than in any previous year.

Political.—Besides presidential electors and a member of Congress, there were to be elected in November a justice of the Supreme Court, two regents of the university, and a Legislature.

The State convention of Republicans met in Virginia City, Aug. 30. The platform approved the national administration; protested against any plan to surrender the Philippines; favored a protective tariff and the building of storage reservoirs; condemned trusts; denounced the disfranchisement of negroes; opposed lotteries; demanded repeal of the statute permitting prize fights; denounced the repeal of the purity of elections law; condemned the State administration; and said on the silver question: "We favor the largest use of silver as a money metal in all manners compatible with the best interests of our Government; and we hereby pledge our nominee for Congress, in the event of his election, to exercise his best endeavors to secure the greatest possible use of silver beneficial to the mining States of this Union without endangering the financial safety of our country."

The State nominations were: For Justice of the Supreme Court, Trenmor Coffin; Regents of the University, George Turritin, Mark Averill.

The Democratic and Silver parties held their conventions the same day, Sept. 6, in Virginia City. Committees appointed to confer on a plan of fusion reached the following agreement: Democrats to nominate two presidential electors and the Silver party one elector; both parties to nominate Hon. Francis G. Newlands for Congressman; the Democrats to nominate the short term university regent and the Silver party the long term regent; and the Silver party to nominate a justice of the Supreme Court. This plan was adopted with one change, that the candidate for justice be selected in joint caucus of the two conventions.

The resolutions adopted by both conventions declared allegiance to the national platform; hailed with satisfaction the nominations of Bryan and Stevenson; declared free and unlimited coinage at 16 to 1 to be the only permanent settlement of the silver question; opposed trusts, especially denouncing the national bank scheme of the administration; condemned the raising of the flag in the Philippines and the hauling it down in the Porcupine mining district of Alaska; expressed sympathy for the Boers; condemned the Porto Rican policy; disapproved the proposed constitutional amendment removing the prohibition of lotteries; favored the repeal of the statute permitting prize fights; and pledged legislative candidates to the passage of an eight-hour law, applicable to all

labor in mines, mills, smelters, and other works for reducing or refining ores, and to extend such law to other classes of labor to which it is applicable, after hearing and consulting with the representatives of such classes, and to provide by law for adding to the duties of one of the State officers, without additional salary, the duty of a commissioner of labor. Further, the resolutions favored water storage for arid lands, to be provided by the Government; demanded protection for all classes from unjust railroad discrimination, and a law limiting the expenditure of candidates at elections. A constitutional convention was declared a necessity.

Following is the fusion State ticket: For Member of Congress, Francis G. Newlands; Justice of the Supreme Court, A. L. Fitzgerald; State University Regent, long term, J. N. Evans; State University Regent, short term, W. W. Booher.

The vote for presidential electors was: Bryan, 6,376; McKinley, 3,860. The fusion ticket was successful, Newlands receiving 5,975 to 4,190 for Farrington. The Legislature will stand on joint ballot: Democrats, 19; Republicans, 13; Silver party, 13; Independents, 3.

NEW BRUNSWICK, an eastern province of Canada; area, 28,100 square miles; population in 1891, 321,263. Capital, Fredericton.

Government and Politics.—There was a good deal of fluctuation in the personnel of the Government in 1900, but no change in the large majority possessed by the Liberal ministry in the Assembly. The year opened with the Hon. H. R. Emmerson as Premier, which office he had held since December, 1897, and with Hon. L. J. Tweedie, Hon. A. T. Dunn, Hon. A. S. White, Hon. C. H. Labillois, Hon. L. P. Farris, and Hon. A. D. Richard associated with him. On Jan. 18 Mr. Emmerson exchanged his office of Commissioner of Public Works for the attorney-generalship held by Mr. White, and Mr. H. A. McKeown at the same time became a minister without office. On Feb. 15 the Legislature was opened by Lieut.-Gov. A. R. McClellan, with the usual speech from the throne. It made a spirited reference to the New Brunswick contingent in South Africa which brought the members to their feet, and a spontaneous outburst of "God save the Queen" when it was afterwards referred to by a speaker. It outlined the policy of the session as including a grant to the provincial volunteers abroad, a revision and codifying of the statutes, and the encouragement of a desirable class of immigration. The session was short, and was prolific neither of legislation nor of excitement. Another transformation in the ministry took place on Aug. 31, when Mr. Emmerson retired to contest Westmoreland in the coming Dominion elections (in which he was successful), and was replaced by the Hon. L. J. Tweedie, a Conservative until 1890 and since that date a member of the ministry. The new Government was as follows: Hon. L. J. Tweedie, Premier and Provincial Secretary; Hon. William Pugsley, Attorney-General; Hon. C. H. Labillois, Commissioner of Public Works; Hon. L. P. Farris, Commissioner of Agriculture; Hon. A. T. Dunn, Surveyor General; Hon. H. A. McKeown and Hon. G. F. Hill, without portfolio.

On Sept. 2 a Provincial Conservative Convention met at St. John, to prepare for the Dominion elections. Josiah Wood, ex-M. P., was chairman, and resolutions were passed expressing gratitude for the success in South Africa and the prospects of a united British country there; placing on record appreciation and admiration of the conduct of Canadian troops in the war; and expressing renewed confidence in the party leaders, Sir Charles

Tupper and Hon. George E. Foster. The convention announced its strong support of the policy of preferential trade and tariffs within the empire; its adherence to the principle of adequate protection to home industries; its belief that provincial politics should be run upon Dominion party lines; its faith in Mr. J. D. Hazen's leadership in the Assembly, and its disapproval of "the gross extravagance and mismanagement" in the provincial Department of Public Works. It denounced the Laurier Government at Ottawa for its violation of pledges, for its reckless and excessive taxation, for its Yukon corrupt railway contracts, and for its deceit in the matter of the prohibition plebiscite.

Finances.—The receipts for the year ending Oct. 31, 1899, were \$764,239 and the expenses \$749,644. The revenue included Dominion subsidies of \$483,501; timber licenses, fishing leases, hunting licenses, etc., of \$184,984; fees from the Provincial Secretary's office, \$10,292; taxes on incorporated companies, \$25,064; succession duties, \$30,233; and liquor licenses, \$20,743. The expenditures included \$15,009 upon the administration of justice; \$34,831 upon agriculture; \$16,831 upon contingencies; \$202,705 upon education, salaries, etc.; \$20,106 upon legislation; \$42,000 upon lunatic asylum maintenance; and \$197,883 upon public works. In his budget speech, Feb. 28, Mr. Tweedie said: "The interest items charged in the public accounts include those on debentures, \$117,866.85; on bank accounts, \$5,764.11; Independent Order of Foresters, \$900; Equity Court deposits, \$5.62; a total of \$124,436.58. The above amount, however, does not include the interest upon debentures issued for permanent bridges, and which, under the law, is chargeable to the board of works. This amounts to \$9,760. Therefore the total amount of interest paid in 1898 was \$13,196.58. He might state that the balance of outstanding coupons was very much reduced during the year, being only \$4,437.50, as compared with \$8,735 in 1897 and \$6,908.75 in 1898. The substitution of 3-per-cent. debentures accounted for this lessening of the interest burden, but the full extent of decrease of interest consequent upon the reduction of rate upon the \$873,500 of 4-per-cent. debentures called in could not be realized in 1899, since a large amount of the 4-per-cent. debentures called for payment of one half year's interest during that year. In the present year the full saving to the province on the conversion of \$873,500 of 4-per-cent. debentures will amount to \$7,638, which will continue annually hereafter, and if used as a sinking fund would redeem two thirds of the 3-per-cent. sterling loan at the expiration of forty years, or at maturity of the loan. There were now \$200,000 of permanent bridge debentures to be issued; but in the present state of the money market he could not expect to realize as good a price as was realized for the last loan, and he would not offer them. He intended to ask the Legislature to change the act so that if they thought advisable he might be in a position to issue 4-per-cent. short-term bonds, and await a favorable condition of the market to issue the 3-per-cent. bonds. The 4-per-cent. short-term bonds would probably bring a premium. The average rate of interest paid upon the provincial bonded debt is 4.10 per cent. At the end of 1897 the average rate stood at 4.47 per cent. The 3-per-cent. transactions of the province during the past two years have therefore reduced the average rate of interest $\frac{3}{10}$ of 1 per cent. Last year the legislative expenses amounted to \$20,105, or \$221.60 below the estimate."

The gross debt of the province on Oct. 31, 1899,

was \$3,324,986. It has shown a steady increase since 1882, when the amount was \$1,228,413. The total assets, including a Dominion debt allowance of \$529,628, were \$588,688. Mr. Tweedie, in his estimates for 1900, included a grant of \$5,000 to the New Brunswick volunteers in South Africa. Against the favorable view of provincial finances afforded in his speech is the Conservative opinion, which is summarized in the following editorial words of the St. John Sun on Sept. 3, 1900: "The truth is, that the financial position of the province requires great prudence and the most economical management. Within the past ten years many new provincial taxes have been imposed. Heavy burdens have been placed on the municipalities from which they were formerly free. School taxes have been increased because of the reduction of the provincial grants. The interest charge continually increases."

Education.—Excellent progress was made by the province in education, and on June 30, 1899, there were 1,806 public schools, 1,912 teachers, 63,536 pupils, and an average attendance of 37,771. The increase in schools was 9, in teachers 30, and in pupils 4,000. The receipts from Government grant were \$193,730; from municipal grants, \$90,857; from district assessments, \$318,000.

Agriculture.—The province is not a great agricultural center, but its progress is steady though slow. The production of wheat in 1899 was 491,810 bushels, on 27,132 acres. There were 5,120 acres of barley and a product of 114,183 bushels; 179,540 acres of oats and 5,114,691 bushels; 72,173 acres of buckwheat and 1,413,018 bushels; 39,501 acres of potatoes and 4,071,200 bushels; 6,036 acres of turnips and 1,507,917 bushels. The total, in round figures, was 12,700,000 bushels, covering 329,000 acres. There was an estimated product of 500,000 tons of hay. The Dairyman's and Farmer's Association of the province did good work during the year in encouraging agriculture, and at its annual meeting in St. John, Feb. 28, 1900, instructive addresses were delivered. The St. John Exhibition, held in October, 1900, was a great success. The attendance was 62,166, compared with 59,514 in 1899, 47,439 in 1898, and 40,182 in 1897.

Fisheries and Shipping.—The value of the yield of New Brunswick fisheries in 1898 was \$3,849,357, making a total of \$98,000,000 since confederation. The amount included salmon, valued at \$238,998; herring at \$1,070,799; cod at \$311,326; lobsters at \$531,524; smelts at \$351,050; sardines at \$423,742. There were 239 vessels, with a tonnage of 3,155 and 859 men, and 678 boats, with 1,237 men, engaged in the operations. The export of New Brunswick fish in 1899 was \$618,414 in value, against nearly \$5,000,000 in Nova Scotia. The total sea-going tonnage in 1899 was 1,284,225, a slight increase over preceding years.

NEWFOUNDLAND, a North American British colony; area, 42,200 square miles; population, about 210,000. Capital, St. John's.

Legislative Session.—The amount of legislation in 1900 was unusually small. This was owing to the disturbed condition of political parties, and the change of government, which led to a general election. A session of the Legislature was held in February for the single purpose of renewing the *modus vivendi*, or interim agreement between the British and French governments in regard to the treaty shore. This *modus vivendi* has been in existence ten years, having been renewed year after year by the local Government to enable the Imperial Government to negotiate with France for a settlement of the question. No progress has yet been made in that direction. The colonial Government's consent is

necessary to the continuance of this agreement, which is never renewed for more than one year. The people of the colony are becoming more and more restive under this agreement, and more urgent in their demands for a final settlement. The Right Hon. Joseph Chamberlain, Secretary of State for the Colonies, took up the question, and sent out commissioners to inquire into the working of the treaties, and great things were expected from his well-known ability and energy. But the war in South Africa broke out, and the time was found to be inopportune for opening negotiations with France. Accordingly, the Imperial Government asked the colonial Government to renew the *modus vivendi* for another year, ending Dec. 31, 1900. On patriotic grounds the request was at once acceded to without a dissentient voice. It was felt to be a duty owed to the empire, not to embarrass the British Government at such a crisis, or do anything that might involve England in complications with France when the stress of a great war was severely felt. The time expired on Dec. 31. The death of Queen Victoria, the accession of a new sovereign, and the continuance of a guerrilla war in Africa seem to render the continuance of the *modus vivendi* desirable. Accordingly, the Hon. Robert Bond, Premier, was invited to visit London to confer with the Imperial Government. The probability is that a renewal of the agreement for another year will follow. All political parties agree in the duty of such renewal if requested. A special meeting of the Legislature is called to pass it.

When the Legislature met in February, 1900, to renew the *modus vivendi*, Mr. Bond, as leader of the Opposition, moved a vote of "want of confidence" in the existing Government, of which Sir James Winter was Premier. The vote was carried, and the resignation of the Government followed. Mr. Bond was then called upon to form a government, in which he was successful. A short session followed, in which only routine measures were introduced, as Mr. Bond decided on appealing to the country, and a general election was in prospect. The chief acts related to a renewal of the revenue act with but one slight change, and an act to make provision for the raising of certain sums of money by sale of debentures, for purposes provided for in the railway contract of 1898.

The general election, the great event of the year, took place on Nov. 8. Every district was contested, and both parties put forth all their strength. The contest turned almost entirely on the contract formed by the Winter Government in 1898 with Mr. R. G. Reid. The party led by Mr. Bond assailed this contract as being injurious to the interests of the colony, as handing over 4,000,000 acres of land, together with the fee-simple of the railway at the end of fifty years, for a present payment of \$1,000,000, and announced their intention of modifying the contract, if returned to power, and of securing a surrender of some of the franchises thus granted. The Opposition, led by Mr. A. B. Morine, sustained the contract in its full integrity, and held it to be irrevocable, except with the consent of the contractor, and that it was most favorable to the best interests of the country. The issue of the electoral contest was remarkable and unprecedented. The supporters of Mr. Bond carried 32 seats out of a total of 36, and only 4 of the Opposition candidates were returned. A majority of 32 to 4 enables Premier Bond to carry any measure that may be decided on. The popular condemnation of the contract and of those who carried it has thus been strongly indicated. It

remains for Mr. Bond to negotiate with Mr. Reid as to the modifications of the contract that will satisfy public sentiment. As a contractor Mr. Reid sustains a very high character, and it is not anticipated that any difficulty will be experienced in coming to terms. The leading feature of the contract is that the contractor undertakes to maintain and operate the railways for fifty years for the land concessions, amounting to 4,000,000 acres; and by the payment of \$1,000,000 in hand he becomes entitled, at the end of fifty years, to a fee simple of the railway. For a long period to come the operation of the railway in a new country must entail considerable losses, and this contract frees the colony from any responsibility in the matter, and \$1,000,000 in hand is equivalent to nearly \$8,000,000 at the end of fifty years.

Business.—The year 1900 was one of considerable prosperity in the colony. The best proof of this is the condition of the revenue. On the termination of the fiscal year, June 30, 1900, the surplus, after all expenses were met, amounted to \$260,000. It is likely that there will be a still larger surplus on June 30, 1901. As the revenue is derived from duties on imports, this indicates an increase of purchasing power on the part of the population.

The fisheries, which are the staple industry of the people, have been on the whole successful, and the prices of the various products have been well sustained. The value of the imports for the year has been, according to the customs returns, \$7,497,147; of the exports, \$8,627,576. The total revenue amounted to \$2,111,638. The funded public debt is \$17,377,101. This was mainly incurred by the construction of nearly 700 miles of railway. The interest on the debt is more than \$600,000 a year, but the strain is not felt seriously.

The total value of the fishery products was \$7,072,537. The seal fishery was successful, 203,850 seals having been taken, and the oil was valued at \$433,605, and the skins at \$162,330. The quantity of dry codfish exported was 1,300,622 quintals; value, \$5,453,538. The value of herring exported was \$176,965. The export of lobsters was in value \$441,202; the export of salmon, \$94,784.

The export of lumber was in value \$100,208. A great expansion in the lumber industry has begun. Mr. Miller, a Scotch lumberer, who had been operating for many years in Sweden, has leased 800 square miles of forest lands in the interior of Newfoundland, built several miles of railway, and has now 600 men employed in cutting down timber. His export will be very large. He will also manufacture pulp for paper making. The quantity of pulp wood in the island is practically inexhaustible.

Mining.—The mining industries were well sustained during the year. The following is a list of mineral exports: Copper ore, ingots, regulus, value, \$617,013; iron pyrites, \$107,265; iron ores, \$319,087; total, \$1,043,355. The great iron mine in Belle Isle, Conception Bay, is one of the most valuable in the world. A part of it was purchased by the Whitney syndicate for \$1,000,000. The whole is now probably worth \$4,000,000. Ore from it will be shipped next summer at the rate of 3,000 tons daily. It is conveyed to Sydney, Cape Breton, for the use of the great iron works there. As a mining country Newfoundland is rising rapidly. Roofing slate of the finest quality and in immense quantities has lately been discovered.

A valuable report on the minerals of Newfoundland was lately presented to the Minister of Agri-

culture and Mines by G. P. Howley, F. G. S., Director of the Geological Survey. He shows that in the ten years from 1888 to 1898 the value of the ores exported from the colony was \$7,829,148, and that the value of such exports in 1898 was \$608,087. He also shows that the total value of copper ore exported since its discovery was \$10,500,000. Thus the island stands sixth in the list of the copper-producing countries of the world.

Sport.—Since the completion of the railway to Port-au-Basque, and the establishment of a steam ferry thence to Sydney, C. B., the influx of tourists, travelers, and sportsmen has been steadily increasing. Last year 110 licenses for caribou shooting were taken out, chiefly by American sportsmen, the fees for which amounted to \$5,600. The American sporting papers generally speak highly of the facilities for sport. The salmon fishing is reported to be excellent. The rivers are now carefully protected.

For caribou the close season is from Feb. 1 to July 15, and from Oct. 1 to Oct. 20, inclusive. Penalty for violation, \$500, or imprisonment. No person not usually resident in the colony shall kill or take caribou without having first procured a license therefor. No venison is allowed to be exported as an article of commerce. Dogs, pitfalls, snares and traps, or weapons other than firearms, are prohibited. Willow grouse, partridge or ptarmigan, curlew, plover, snipe, or other wild or migratory bird (except wild geese), can not be shot between Jan. 12 and Sept. 15; the penalty is \$100. Wild rabbit or hare may not be killed between March 1 and Sept. 15; otter between April 1 and Oct. 1; foxes between March 15 and Oct. 15; beaver, close time to Oct. 1, 1903. No trout, char, whitefish, landlocked salmon, or grilse, or any fresh-water or migratory fish, can be caught, taken, or killed in any lake, river, or stream in the colony from Sept. 15 to Jan. 15.

Sir Henry McCallum, the present Governor, has received an appointment to the governorship of Natal, in South Africa. He is to be succeeded by Sir Cavendish Boyle.

NEW HAMPSHIRE, a New England State, one of the original thirteen, ratified the Constitution June 21, 1788; area, 9,305 square miles. The population, according to each decennial census, was 141,885 in 1790; 183,858 in 1800; 214,460 in 1810; 244,022 in 1820; 269,328 in 1830; 284,574 in 1840; 317,976 in 1850; 326,073 in 1860; 318,300 in 1870; 346,991 in 1880; 376,530 in 1890; and 411,588 in 1900. Capital, Concord.

Government.—The following were the State officers during the year: Governor, Frank W. Rollins; Secretary of State, Edward N. Pearson; Treasurer, Solon A. Carter; Adjutant General, Augustus D. Ayling; Insurance Commissioner, John C. Linehan; Labor Commissioner, Lysander H. Carroll; Superintendent of Public Instruction, Channing Folsom; Bank Commissioners, Alpheus W. Baker, John Hatch, George W. Cummings; Railroad Commissioners, Henry M. Putney, Josiah G. Bellows, E. B. S. Sanborn; State Librarian, Arthur H. Chase; Chief Justice of the Supreme Court, Isaac N. Blodgett; Associate Justices, William M. Chase, Robert M. Wallace, Frank N. Parsons, Robert G. Pike, Robert J. Peaslee, John E. Young; Attorney-General, Edwin G. Eastman.

The State elections are held biennially in November of even-numbered years. The Legislature meets in January of odd-numbered years.

Population.—The population of the State in 1900 was 411,588, an increase since 1890 of 35,058, or 9.3 per cent. This rate of increase has been substantially constant for three successive decades. The total land surface of New Hampshire is, ap-

proximately, 9,005 square miles, the average number of persons to the square mile at the censuses of 1890 and 1900 being as follows: 1890, 41.8; 1900, 45.7. Of the 10 counties, all but 2 increased in population during the decade. The greatest gains are shown in Coös County (26.9 per cent.) and in Hillsborough County (20.7 per cent.). Hillsborough shows much the largest numerical increase, having gained 19,393—12,861 representing the increase in the city of Manchester. The 2 counties showing a decrease are Belknap and Carroll. The population by counties is: Belknap, 19,526; Carroll, 16,895; Cheshire, 31,321; Coös, 29,468; Grafton, 40,844; Hillsborough, 112,640; Merrimack, 52,430; Rockingham, 51,118; Strafford, 39,337; Sullivan, 18,009. There are 11 cities in the State, the population of which, in 1890 and 1900, was as here shown:

CITIES.	1890.	1900.
Berlin.....	8,720	8,898
Concord.....	17,004	19,632
Dover.....	12,790	13,207
Franklin.....	4,085	5,546
Keene.....	7,446	8,163
Laconia.....	6,143	8,049
Manchester.....	44,126	56,987
Nashua.....	19,311	26,895
Portsmouth.....	9,827	10,637
Rochester.....	7,396	8,406
Somersworth.....	6,207	7,023

Finances.—The cash in the treasury, June 1, 1899, was \$341,586.88; receipts during the year, \$1,285,684.10; total, \$1,627,270.98. The disbursements during the year to June 1, 1900, were \$1,170,743.66; cash on hand at same date, \$456,527.32; liabilities June 1, 1899, \$2,026,021.38; assets June 1, 1899, \$690,953.33. The net indebtedness June 1, 1899, was \$1,335,068.05. The liabilities June 1, 1900, were \$1,912,792.99; assets, \$793,994.05. The net indebtedness June 1, 1900, was \$1,118,798.94; reduction of debt during the year, \$216,269.11. The revenue was from the following-named sources: State tax, \$425,000; railroad tax, \$148,772.28; insurance tax, \$32,284.00; interest on deposits, \$3,840.77; license fees (fertilizers), \$1,200; telegraph tax, \$3,540.40; telephone tax, \$5,505.99; charter fees, \$450; fees (insurance department), \$12,204.10; Benjamin Thompson estate, income for year ending Jan. 30, 1900, \$22,551.84; fees (Secretary of State), \$4,729.65; fines and forfeitures, \$458.40; Spanish War (the United States in part), \$28,443.15; town liquor agents, \$54.30; escheated estates, \$99.05; fines, National Guard, \$9; sales public property, \$86.36; refund costs of prosecution, insurance department, \$31.80; refund American Express Company, overcharge, \$2.20; total, \$689,264.19.

The ordinary expenses, including salaries and expenses whose payment is authorized by general laws, were \$277,912.90; extraordinary expenses, \$94,896.05; interest, \$100,186.13; total expenses, \$472,995.08. Excess of revenue over expenses, \$216,269.11.

The disbursements by departments were: Executive, \$5,363.90; Secretary, \$6,814.31; Treasurer, \$5,322.80; Adjutant General, \$2,672.75; Public Instruction, \$5,536.76; Insurance, \$6,814.63; Supreme Court, \$31,607.66; Probate Court, \$15,734.25; State Library, \$17,203.92; Statehouse, including special appropriation for vaults, \$12,566.27; Asylum for the Insane, including special appropriation of \$25,000, \$40,072.41; Fish Commissioners, \$9,626.34; Railroad Commissioners, \$8,389.14; Bank Commissioners, \$10,087.40; National Guard, \$30,000; Industrial School, \$15,400; State Prison, \$5,607.51; College of Agriculture and the Mechanic Arts, \$10,769.04; Normal School, \$17,902.12;

Board of Agriculture, \$6,033.53; Board of Equalization, \$887.78; State Board of Health, \$4,250; Labor Bureau, \$2,730.01; Forestry Commission, \$1,190.95; Commissioners of Lunacy, \$16,964.77; and Soldiers' Home, \$10,902.28.

The trust funds are now as follow: Fiske legacy, \$26,378.43; Kimball legacy, \$6,753.49; Teachers' Institute, \$58,668.98; Agricultural College, \$80,000; unclaimed savings-bank deposits, \$1,963.71; Benjamin Thompson trust, \$538,547.38; Benjamin Thompson State trust, \$37,459.07; Hamilton Smith trust, \$10,000; total, \$759,771.06.

The Treasurer says in his report: "The condition of the treasury and the results accomplished during the year show a reduction of the State debt by \$216,269.11, and a cash balance sufficient to meet all probable demands until the revenues for the year become available."

On June 21 the State received from the United States, as the balance of its claim on account of the Spanish War, \$23,709.33, making a total reimbursement of \$52,152.48 on claims amounting to \$53,901.83.

Taxation.—The railroad, telegraph, and telephone taxation for 1900 was as follows: Railroad tax, \$382,855.34, against \$358,878.22 for 1899; telegraph, \$3,094, against \$3,540.40; telephone, \$5,910.90, against \$5,661.64; total, \$391,860.24, against \$368,083.26.

The railroad tax is paid by the corporations to the State Treasurer, and divided as follows: One fourth part to towns through which the roads pass, for right of way and buildings, proportioned to expenditure for the same; the other three fourths to each town in the State, such portion thereof as the number of shares owned in said town bears to the whole number of shares in the corporation; and the rest of the three fourths (nonresident) directly to the State. The telegraph and telephone tax is paid to the State Treasurer and not divided, but held by the State as part of its revenue. The expense of the railroad commission is met by a tax levied on the gross receipts of the railroads. Its amount is \$7,333.97, against \$7,430.19 for 1899.

Corporations.—The annual report of the Secretary of State gives returns (as required by law) from 274 incorporated companies doing business in this State—insurance companies, railroad corporations, banks, and loan and building associations not included—showing an aggregate capital paid in of \$26,105,564.82, and assets aggregating \$31,572,670.98. A large number of corporations, however, fail to comply with the provisions of the law, the penalty for noncompliance being that "the treasurer and directors are individually liable for all the debts and contracts of the corporation then existing, or which shall be contracted, until the return is made." Many successful corporations prefer to take this risk rather than make the details of their business public.

Banks.—There are under the supervision of the bank commissioners 80 savings banks, 12 State banks and trust companies, 10 of which have savings departments, and 18 building and loan associations. Twenty-eight savings banks and 3 trust companies are in liquidation. The commissioners say: "Satisfactory progress has been made during the year in the process of liquidating most of these banks. Many of them have during the year declared dividends to the depositors, and, as shown, there are but few banks that are in liquidation which have not repaid to the depositors up to this time 70 per cent. of the deposits."

The following is a statement of the liabilities and assets of the savings banks and savings departments of the trust companies that are in active

operation as reported at the close of business, June 30, 1900:

Savings banks—Amount due depositors, \$53,896,710.79; guarantee fund, \$2,058,287.58; interest, \$1,262,304.69; premium, \$3,945,768; total, \$62,063,071.06. **Assets**—Loans on mortgage security (local), \$9,846,934.32; loans on mortgage security (western), \$5,350,727.81; loans on personal security (local), \$5,709,437.49; loans on personal security (western), \$747,035.39; loans on collateral security (local), \$5,260,309.21; loans on collateral security (western), \$288,285.93; United States and State bonds, \$936,022; county, city, town, and district bonds, \$7,928,364.74; railroad bonds, \$7,989,170.55; miscellaneous bonds, \$2,998,199.21; bank stock, \$2,022,131.49; railroad stock, \$6,241,928.35; manufacturing and miscellaneous stocks, \$1,283,311.50; miscellaneous investments, \$99,480.62; real estate by foreclosure, \$3,009,249.92; local real estate, bank buildings, etc., \$562,483.63; cash on deposit in authorized banks, \$1,640,924.64; cash on hand, \$149,074.26; total, \$82,063,071.06.

State banks and trust companies—Capital stock, \$560,000; surplus fund, \$71,056.05; undivided profits, \$33,654.10; business deposits, \$989,536.26; miscellaneous indebtedness, \$197,027.83; premiums, \$8,574.50; total, \$1,859,848.74. **Assets**—Loans on real estate, \$255,271.64; loans on personal security, \$517,146.13; loans on collateral security, \$213,501.37; municipal bonds, \$35,847.80; railroad bonds, \$33,446.50; miscellaneous bonds, \$142,930.56; bank stock, \$20,175; railroad stock, \$74,935.50; manufacturing and miscellaneous stocks, \$8,220; miscellaneous investments, \$58,698.17; real estate, \$90,419.78; cash on deposit, \$318,951.89; cash on hand, \$90,304.40; total, \$1,859,848.74.

The commissioners say: "The improvement in the character of the assets of savings banks is in a great measure due to the action of the Legislature of 1895 in restricting and regulating investments. The law has been in force since July 1, 1895, and has demonstrated its value."

Two new banks were opened during the year 1900, viz., the Hillsborough County Savings Bank, of Manchester, and the Citizens' Institution for Savings, of Nashua.

The total assets of the 16 building and loan associations doing business, as returned June 30, 1900, was \$1,830,162.53, divided as follows: Loans on real estate to members, \$1,606,873.90; loans on shares to members, \$36,411.20; loans to nonmembers, \$55,275; miscellaneous bonds and other assets, \$75,965.33; cash on hand, \$55,637.10. No foreign building and loan associations are authorized to do business in this State.

Insurance.—The report of the Insurance Commissioner for 1899, issued March 1, 1900, shows that 11 companies of other countries and 7 companies of other States were licensed since the last annual report. Of the foreign companies, 1 comes from Ireland, 3 come from England, and 4 from Germany—all conducted on the stock plan. The number of companies now doing business in New Hampshire is 117, including 29 mutual and 88 stock companies.

The surplus as regards policy holders (which means the surplus above all liabilities and the amount of the paid-up capital added to it) of all authorized companies, save the State mutuals, was for the year 1899 (93 companies) \$126,364,006.09.

The companies of other States and countries have paid all losses promptly and honorably.

A recapitulation of the business of the 30 New Hampshire companies for 1899 is as follows: Town mutuals (18 companies)—Risks written, \$680,546; premiums and assessments received, \$7,605.66;

losses paid, \$6,093.28; risks in force, \$2,981,930. The Grange, Merrimack County, and Rockingham Farmers' Mutual—Risks written, \$2,931,298; premiums and assessments received, \$36,248.64; losses paid, \$28,714.14; risks in force, \$11,053,756.48. The Grange Company confines its business to its own members. Two cash mutuals—Risks written, \$4,114,560.23; premiums received, \$60,727.54; losses paid, \$42,881.91; risks in force, \$7,270,938.

The business of the 6 New Hampshire stock companies was as follows: Risks written, \$35,933,736.94; premiums received, \$468,926.13; losses paid, \$230,890.46.

The surplus as regards policy holders of the 3 larger stock companies—namely, the Granite State, the Capital, and the New Hampshire—for Dec. 31, 1899, was \$2,573,426.78. The gross assets of the 3 companies on Dec. 31, 1899, were \$4,275,570.35. The business written by them within the State in 1899 was \$34,250,000, and within and without the State they wrote more than \$208,000,000.

The total business of New Hampshire companies within the State for 1899 was: Risks written, \$43,660,141.81; premiums received, \$573,507.97; losses paid, \$308,579.79—a gain of nearly \$2,000,000 in insurance written.

The business of other States and countries (82 companies) was: Risks written, \$60,014,039.25; premiums received, \$794,680.96; losses paid, \$438,749.11.

Total business of all authorized companies within the State was: Risks written, \$103,674,181.06; premiums received, \$1,368,189.93; losses paid, \$747,328.90. The increase among all authorized companies in the amount of insurance written was more than \$12,000,000. The premiums aggregated nearly twice the losses.

Railroads.—The only important change in New Hampshire railroads in 1900 was the lease of the Fitchburg system to the Boston and Maine, which gives the last-named corporation control of all but about 100 miles of the line of track in the State. This 100 miles is divided about equally between the Grand Trunk and the Maine Central. The only new steam road built during the year was the Manchester and Milford, about 18 miles, which was opened Jan. 1, 1901. As all New Hampshire's steam railroads extend into other States, it is impossible to give the amount of their traffic in this State for 1900, but it doubtless compares favorably with that of 1899, which was a very prosperous year. All the steam roads are in better physical condition than ever before, and are well equipped.

The new electric or street roads include one from Manchester to Goffstown, 10 miles; the Portsmouth, through the streets of that city and through Rye and North Hampton to Hampton, and some extensions on the branch of the Exeter, Hampton and Amesbury road.

Bureau of Labor.—The canvass of the State for the year ending June 30 shows creameries reporting, 45; capital invested, buildings and equipments, \$226,840; value of production, \$1,179,055; number of persons employed, 121; wages paid, \$56,694. These figures are distinct from the cream and milk products that find sale in Boston and elsewhere.

The labor statistics for the steam railroads are these: Mileage of all systems, 1,320; number of men employed, 9,898; aggregate wages paid for the year, \$5,559,640. The mileage of street-railways, July 1, 1900, was 103½; number of employees, 413; wages paid for the year, \$236,236.

Agriculture.—The agricultural fairs include an exhibition known as the Concord State Fair, 6 county or district fairs, and about 50 town ex-

hibitions. The Granite State Dairymen's Association and the New Hampshire Horticultural Society receive aid from the State, and have promoted the dairy and horticultural interests. Numerous poultry associations are active.

Twenty-five Farmers' Institutes were held in 1900, each meeting consisting of three sessions; a meeting in connection with



CHESTER B. JORDAN,
GOVERNOR OF NEW HAMPSHIRE.

Dairymen's Association was held at Lancaster in December, a good-roads meeting at Newport in May, and others.

The statutes forbid the sale of imitation butter colored to resemble pure butter, and forbid such colored product to be served in restaurants, boarding-houses, or hotels without a notification to guests. The Legislature of 1898 made it the duty of the State Board of Agriculture to enforce this law, and the board immediately authorized an agent to proceed against all violators, and their vigorous action has practically suspended the illegal sale and use of this product in the State.

In 1899 and 1900 the Board of Agriculture inspected 558 stables, and condemned and destroyed 392 tuberculous cattle and 20 glandered horses.

Reports from the selectmen of 136 towns on the "abandoned-farm" question give the following results: Number of farms or parts of farms now occupied as summer homes, 849; total estimated cost of permanent improvements made upon land and buildings purchased for this purpose, \$1,959,550; estimated number of people occupying these places during a part or all of the summer, 12,912.

National Guard.—The reorganization of the National Guard took effect Jan. 23, 1900, and is in conformity to the infantry regiments of the United States army. The strength of the brigade, as appears from the last quarterly returns received, is 126 commissioned officers and 1,290 enlisted men. It now consists of 2 12-company regiments instead of 3 regiments of 8 companies each, as heretofore. The light battery and troop of cavalry remain as before. On Sept. 19 the entire New Hampshire National Guard was mobilized in Portsmouth to take part in the celebration connected with the presentation of testimonial tablets to the United States battle ships *Kearsarge* and *Alabama*, and in honor of the Secretary of the Navy, Admiral Sampson, Gov. Joseph F. Johnston, of Alabama, and staff, and other guests, and paraded with the sailors and marines of the North Atlantic squadron and various local societies.

Education.—The formation of 3 supervisory districts in 1900 is the beginning of the most promising advance New Hampshire has made educationally since the abolishment of the district system. The matter of supervisors was presented to the town school meetings of the State in the spring. Twenty-seven towns approved it, and authorized their school boards to form combinations with other towns; but owing to the scattered locations of these towns, only 9 were able to accomplish the desired combinations, forming

3 districts. Under the new law the State pays half the salary of the supervisors, and these supervisors must hold certificates of an examination by the State Superintendent—a severe one along professional as well as scholastic lines.

The State Library.—During the year ending May 31, 1900, 6,845 bound volumes were added to the library, making the total number 82,059. The number of unbound volumes, exclusive of periodicals, was 31,794, and the number of unbound periodicals was 11,671. The average annual increase of bound volumes in the last four years has been 6,493. The officials have avoided to the greatest extent possible accepting books that appear to be of no use except to fill the shelves. The law books number a little more than 18,000 volumes. The historical department contains nearly 8,000 bound volumes and 2,100 unbound volumes. The medical department contains more than 4,000 bound volumes, 1,500 unbound volumes, and 4,300 unbound periodicals.

State Board of Health.—The board was organized and began work in 1881. Since then there has been established, through its efforts, a local board of health in every town in the State, and mortality from contagious and infectious diseases has been reduced to a very marked extent. The advantages of pure drinking water, and the dangers of a polluted source, especially of surface wells, have been made apparent, and public water supplies from unquestioned sources have been introduced into many towns and villages. Also the ventilation of many buildings has been greatly improved.

New Hampshire has now probably the most accurate system of registration of vital statistics of any State in the Union, and its records have become of great value. The department has on file the records of more than 500,000 persons who are living or have lived in the State, and these are being increased at the rate of 20,000 annually.

The number of deaths in New Hampshire in 1899 was 7,045, a rate of 17.27 for each 1,000 of the population (based upon a total of 407,938 for that year).

Charities and Corrections.—This board was authorized by an act of the Legislature, passed in March, 1895, and consists of five members—3 men and 2 women—appointed by the Governor and Council. The board is chiefly supervisory and advisory, as the dependent children of the State are primarily under the direct care of the county commissioners, or of the overseers of the poor of the towns or cities. But the board has, with great labor and pains, completed a record of all the children within the State now dependent upon the public for support, up to Dec. 1, 1900, covering 443 names; and a supplementary record, including all those children who have passed from public support since their work began, now numbering 76. The 443 children are placed as follows: Still in almshouses, 67; placed in orphan's homes, 238; placed in families, 113; in industrial school, 24; in asylum for the insane, 1. In addition to the above, 39 children are supported outside of the State. The total number of dependent children for the whole State, at public and private charges, is 1,061. This number does not include many who are partially supported at their own homes.

Industrial School.—This institution is at Manchester. The number in the school, Sept. 30, 1900, was 147; whole number committed to the institution since its beginning, 1,932. The institution is a place for reformation, not a prison.

Asylum for the Insane.—The number of patients in the asylum at the close of the year

ending Sept. 30, 1900, was 425. The average daily number for the year was 420.13. An appropriation of \$50,000, made by the Legislature of 1899, for new buildings and improvements, has resulted in two new buildings and important repairs to the old ones. Ever since the opening of the asylum in 1842 it has been self-supporting. Its current receipts have sufficed to meet its expenses, including the cost of ordinary repairs, but the new buildings have been furnished by the State. It has been a semi-private and semi-State institution. Through the action of the Supreme Court and the Legislature, however, it has now become a State institution, owned and operated by the State through a board of trustees appointed by the Governor and Council.

The State Prison.—The whole number of convicts in the prison, Nov. 30, 1900, was 151 males and 2 females. Of this number 132 can read and write. The average number in prison in 1896 was 181; in 1900, 140. This decrease probably results from the increasing tendency of the courts to commit convicts to the county institutions rather than to the State prison. An order abolishing visitors' days and visiting fees has been issued, and is clearly a beneficent regulation, assisting in the preservation of discipline, and restraining idle and vulgar curiosity. It is appreciated by the convicts. The discipline of the institution is rigid, but the results fully justify the maintenance of the present admirable system. The most interesting incident of the year was the return of Mark Shinborn, the notorious bank robber, after an absence of thirty-four years. He was committed (at the age of twenty-four) Feb. 27, 1866, for ten years; escaped Dec. 3, 1886; was re-arrested in 1900, and returned Nov. 8 to serve his unexpired term.

The Soldiers' Home.—Up to Jan. 1, 1899, 369 men were received into the home. In 1899 and 1900 47 others were admitted. The number now in actual attendance is 86. The average cost per capita of maintenance in 1900 was \$221.43. In 1899 a new laundry plant was added to the home, at an expense of \$1,797.47; also an electric-light plant, costing \$900, and other improvements. The library contains 1,400 bound volumes and a large number of periodicals and newspapers. On July 21, 1899, lightning struck the hospital in two places, damaging the interior somewhat, but doing no personal injury.

The Anti-Saloon League.—The funds contributed for the prosecution of the work of the league were \$5,600, and the expense for the year was about \$5,000. "The past year has been one of such great activities and encouraging advancement that the Anti-Saloon League is now favorably known in every city and in nearly every village and town in the State, and numbers its adherents and sympathizers by thousands." The most important department of its work is the Agitation Department, which is promoted by circulation of literature and by public speech and song. In the year ending Nov. 15, 1900, 320 public meetings were held. Much has been accomplished also by the Legislative Department, in influencing the nomination and securing the election of temperance men to the Legislature and as town officers.

Old Home Week.—The idea of Old Home Week was suggested by Gov. Frank W. Rollins. He says, "The loss and decay in some of the agricultural sections of New Hampshire were brought closely home to me, and it was while studying this problem and its remedy that the idea of Old Home Week occurred to me as a possible help in restoring lost people and conditions." In the

spring of 1899 he called a convention at Concord of all interested, which was largely attended. From this association more than 50 local societies were at once organized, and more than 50 towns celebrated the new festival in the following August; in 1900 more than 100 more. It now appears to have become a permanent festival.

Political.—The official vote for presidential electors was: For McKinley, 54,803; for Bryan, 35,489.

The whole number of votes cast in the State was 92,352, in a total population of 411,588—one voter to every 4½ of the population.

The official vote for Governor was: For Chester B. Jordan (Republican), 53,891; for Frederick E. Potter (Democrat), 34,956. The Governor's Council consists of 5 members—all Republicans; the Senate, of 23 Republicans and 1 Democrat; the House of Representatives, of 300 Republicans and 97 Democrats.

NEW JERSEY, a Middle Atlantic State, one of the original thirteen, ratified the Constitution Dec. 18, 1787. Area, 7,815 square miles. The population, according to each decennial census, was 184,139 in 1790; 211,149 in 1800; 245,562 in 1810; 277,426 in 1820; 320,823 in 1830; 373,306 in 1840; 489,555 in 1850; 672,035 in 1860; 906,096 in 1870; 1,131,116 in 1880; 1,444,933 in 1890; and 1,883,669 in 1900. Capital, Trenton.

Government.—The State officers in 1900 were: Governor, Foster M. Voorhees; Secretary of State, George Wurtz; Treasurer, George B. Swain; Comptroller, William S. Hancock; Attorney-General, Samuel H. Grey; Adjutant General, William S. Stryker; Superintendent of Public Instruction, Charles J. Baxter; Commissioner of Banking and Insurance, William Bettle—all Republicans. Chief Justice of the Supreme Court, William J. Magie (succeeded by David A. Depue); Associate Justices, Gilbert Collins, Jonathan Dixon, Bennet Van Syckel, Charles G. Garrison, William S. Gummere, George C. Ludlow (died in December), John Frank Fort, and A. Q. Garretson; Court of Errors and Appeals, Judges, J. W. Bogart, G. Krueger, Frederick Adams, W. H. Vredenburg, Charles E. Hendrickson, and Peter V. Voorhees. Chancellor, William J. Magie.

Population.—The population of the State, by counties, in 1900, was: Atlantic, 46,402; Bergen, 78,441; Burlington, 58,241; Camden, 107,643; Cape May, 13,201; Cumberland, 51,103; Essex, 359,053; Gloucester, 31,905; Hudson, 386,048; Hunterdon, 34,507; Mercer, 95,365; Middlesex, 79,762; Monmouth, 82,057; Morris, 65,156; Ocean, 19,747; Passaic, 155,202; Salem, 25,530; Somerset, 32,948; Sussex, 24,134; Union, 99,353; Warren, 37,781; total, 1,883,669.

The population of Jersey City was 206,433; of Newark, 246,070; of Trenton, 73,307; of Paterson, 105,171; of Elizabeth, 52,130; of Camden, 75,935; of Hoboken, 59,364; of Atlantic City, 27,838; of Bayonne, 32,722.

Finances.—The Treasurer's report presents the transactions for the fiscal year ending Oct. 31, 1900.

The receipts of the State fund, including balance from the preceding year, were \$4,876,949.13, and the disbursements were \$2,871,726.97, leaving a balance of \$2,005,222.16, which was larger than the balance of the year before by \$752,069.03.

The receipts of the school fund, including balance, were \$841,585.64, and the disbursements were \$762,145.94, leaving a balance of \$79,439.70, which was larger by \$18,718.82 than the balance of the year before. The State school tax amounted to \$2,333,550.

The receipts and disbursements of the Agricultural College fund were \$4,080.

The local tax on railroad corporations amounted to \$407,173.06.

The disbursements were as follow: Adjutant General's department, \$10,276.37; advertising, \$2,498.13; Agricultural College fund, interest, \$2,400; Agricultural Experiment Station, \$16,849.79; Assembly Committee of Investigation, \$2,941.38; Attorney-General's department, \$13,796.51; blind and feeble-minded, \$79,078.34; Board of Fish and Game Commissioners, \$21,500; Board of Pilot Commissioners, \$1,100; Board of Visitors to Agricultural College of New Jersey, \$139.54; Bradley's New Jersey Citations, \$1,500; Bureau of Statistics, \$9,700.11; collateral inheritance tax, \$9,819.84; commissions, \$249.50; county lunatic asylum, \$187,800.15; Court of Chancery, \$72,178.08; Court of Errors and Appeals, \$10,510.50; Court of Pardons, \$1,740.48; deaf-mutes, \$43,000; Delaware Bay and Maurice River Cove Oyster Commission, \$23,985.68; Department of Banking and Insurance, \$22,161.16; discharged convicts, \$2,000; emergency, \$9,991.65; Executive Department, \$15,208.80; factories and workshops, \$9,967.73; Farnum Preparatory School, \$1,456.86; feeble-minded, \$4,885.89; free school libraries, \$5,290; geological survey, \$12,999.68; Home for Disabled Soldiers, \$20,000; Home for Feeble-minded Women—Vineland, \$7,002.25; industrial education, \$43,192.80; Industrial School for Girls, \$12,174.34; insurance, \$200; law and equity reports, \$7,687.60; Legislature, \$83,753.78; loans to school fund, \$193,000; Manual Training and Industrial School at Bordentown, \$5,000; Monmouth battle monument, \$437.84; National Guard, \$134,994.15; Naval Reserve, \$16,403.61; Newark armory, \$50,000; New Jersey Home for Disabled Soldiers, Sailors, Marines, and their Wives, \$20,496.30; New Jersey State Horticultural Society, \$400; office of clerk in Chancery, \$33,281.24; office of clerk of the Supreme Court, \$23,048.23; office of the Comptroller, \$13,683.99; office of the Secretary of State, \$28,848.42; office of the Treasurer, \$12,885.13; Oyster Commission, \$9,890.62; Oyster Commission (claims), \$1,961.32; Palisades, \$2,500; pensions, \$4,743.72; presentation of sword, \$302.50; preservation of records, \$3,500; printing, \$41,897.64; public roads, \$153,432; Quartermaster General's department, \$9,946.93; Rahway Reformatory, \$260,000; Reform School for Boys, \$32,248.40; refunded taxes on exempted miscellaneous corporations, \$131.81; Riparian Commission, \$12,875.79; riparian lands, \$20,575.52; school census, \$1,500; school fund expenses, \$3,513.68; sinking fund account, \$4,260; sinking fund—legal expenses, \$836.88; soldiers' State pay, \$9; Spanish-American War medals, \$30.75; State Board of Agriculture, \$6,912.24; State Board of Arbitration, \$6,216.50; State Board of Assessors, \$22,562.70; State Board of Children's Guardians, \$2,819.56; State Board of Education, \$3,102.25; State Board of Health, \$15,126.70; State Board of Taxation, \$13,589.84; State Charities Aid Association, \$600; State Dairy Commissioner, \$13,460.29; State Home for Boys, \$29,946.57; State Home for Girls, \$27,561.56; State hospitals, \$923.59; State Hospital at Trenton, \$75,859.72; State Hospital at Morris Plains, \$225,435.09; Statehouse Commission, \$55,000; Statehouse Commission—special, \$500; Statehouse Building Commission, \$46,000; State Library, \$7,599.92; State Museum, \$1,922.20; State Normal School, \$49,999.05; State Prison maintenance, \$93,001.06; State Prison furniture, appliances, and repairs, \$11,880.28; State Prison salaries, \$100,064.59; State Sewerage Commission, \$9,118.48; State traveling libraries, \$2,000; Supreme Court, \$106,738.90; Superintendent of Public Instruction, \$12,943; Teachers' Institute, \$3,000; teachers' libraries, \$400; transportation of

prisoners, \$308.20; Trenton battle monument, \$500; Tuberculosis Commission, \$10,500; village for epileptics, \$46,961.67; Washington Association of New Jersey, \$2,500; Weather Service, \$1,000; total, \$2,871,726.97.

The Comptroller gives the following statement of the State debt: "The last installment of the civil war debt, amounting to \$71,000, falls due Jan. 1, 1902. Certificates of the State issued to the Commissioners of the Agricultural College amount to \$48,000, which sum added to the balance of the war debt makes the entire debt of the State \$119,000. The assets of the State fund consist of 1,887 shares of the stock of the United Railroad and Canal Companies of New Jersey, the market value of which amounts to \$505,716, independent of the assets of the sinking fund, which the State Treasurer reports amount to \$207,526.45."

Under an act to tax intestates' estates, gifts, legacies, and collateral inheritance in certain cases, \$177,074.54 was received from estates, upon assessments made by the surrogates and Register of the Prerogative Court, being an increase over the previous year of \$91,553.86.

State Institutions.—The number of convicts received at the State Prison in the year was 472; the whole number in the prison, Nov. 30, 1900, was 1,091. The average number of patients in the hospital was 31. There were 5 deaths. The total expenditure was \$206,707.43. Extensive repairs and improvements were made, and these cost \$11,880.28. The average number of men employed in the shops during the year was 599, and the amount earned by their labor was \$75,952.04. The average number of prisoners employed was 57 less than in the preceding year, and the decrease in the earnings, compared with preceding year, was \$790.25. This decrease was due to the fact that more of the contractors during the last fiscal year than in the preceding year availed themselves of the privilege accorded in their contracts of suspending work at times.

The State Hospital for the Insane, at Trenton, received in 1900 265 patients; it discharged 160 men and 158 women. Of those discharged, 84 were reported recovered, 30 improved, 104 died, and 91 were removed to other institutions. At the close of the fiscal year, Oct. 31, the whole number in the hospital was 1,117, which was 277 more than the normal capacity of the building. Considerable improvements were made in the buildings.

The State Village for Epileptics, at Skillman, had 25 patients, Oct. 31—17 men and 8 women. Three were discharged (insane), 2 escaped, and 1 died. The managers say in their report: "There are many patients in the hospitals for the insane, kept there to their own detriment and that of the class of persons for whom those institutions are maintained. There are others in the almshouses, and many who are in private families where they are a grievous burden to those who are about them, families in many cases who are unable to support themselves under the most favorable circumstances, and when embarrassed with the care of epileptics are discouraged. A long list of applications is on file, including many earnest appeals from the parents of children. . . . While the disease is not ordinarily directly amenable to medicine, it has been conclusively proved that a regular method of living and open-air occupation, without the imposition of exhausting tasks, diminish to a great degree the number and severity of the seizures, and recovery in an increasing ratio ensues."

The trustees of the State Home for Girls, at Trenton, say in their annual report: "During the

year the number of inmates has been materially reduced, some of them having been paroled under the provisions of the new law and others having been put out under indenture, where they are now in good homes, and still others having been discharged because they had reached the age of twenty-one years. The number of inmates reported for the year ending Oct. 31, 1899, was 138; now, for the year ending Oct. 31, 1900, it is 115. . . . Special efforts have been made to develop in each girl an interest in some definite kind of work, and we believe this has been attended with a good degree of success. The religious interests of the inmates are carefully attended to, an excellent Sabbath school and other religious services being conducted on the Sabbath day. Amusements and entertainments suitable to particular seasons and occasions have also from time to time been given to the inmates of the home. The superintendent says: "A larger number than usual has been sent out from the home. Of these, 8 were indentured, 2 were paroled, 4 escaped who were not returned, 7 became of age in the home, 1 died, and 18 were discharged to friends. Of the 18 who were discharged, we have received reports from 15, showing that they are doing well. Nine of these were over nineteen years of age when discharged."

At the State Home for Boys the number remaining Oct. 31, 1899, was 405; number committed or returned since, 146; total number cared for during the year, 551; number discharged, 158; number remaining Oct. 31, 1900, 378. Of these, 293 were white and 85 colored. The boys are instructed in sloyd, carpentry, masonry, blacksmithing, painting, shoemaking, baking, printing, brush making, steam fitting, and some other occupations. A trade-school building is in process of erection.

At the close of the fiscal year the Home for Feeble-minded Women had 113 under its care; 12 had been admitted in the year and 4 discharged. In the school department are taught weaving of plain and fancy baskets, designing in Venetian bent-iron work, braiding raffia for moccasins, mounting pictures, wood carving, lathe work, advanced modeling, Swedish gymnastics, fancy drills and photography, while in the primary department, reading, arithmetic, spelling, and Nature studies are taught, with writing and drawing, forming original designs from the different triangles, etc. The more advanced class has also United States history and a course in music. In the sewing room prizes are given for the best work. One girl's record for the year consisted of 150 aprons, 36 school dresses, 24 articles of underwear, 6 plain nightgowns, besides her garden work of successfully slipping 1,000 plants. Prizes are given for industry.

The Home for Disabled Soldiers, at Kearny, had 566 inmates at the beginning of the year, admitted 216, and had 542 on Oct. 31, 1900. The number that died was 78; others were discharged or dropped from the rolls. The library of the home has 2,500 volumes. Larger accommodations are needed.

At Vineland there is a Home for Disabled Soldiers, Sailors, or Marines, and their Wives. It was opened Jan. 1, 1900. In the year 25 couples were admitted, and at its close there were 22 men and 24 women on the rolls. The men receive a uniform, consisting of a military blouse, vest, and trousers, black felt hat, and good substantial foot gear, together with the necessary underwear, while the women receive cloth dresses, wraps, hats, shoes, and all other needful articles for indoor and outdoor wear.

The New Jersey Firemen's Home was opened July 10, 1900. At the close of the year it had

received 7 inmates. The receipts from all sources amounted to \$3,934.65, and the disbursements to \$3,308.13.

Libraries.—There was a great increase of interest in library matters during 1900. The State now contains 77 free public libraries. The revival of interest began when Andrew Carnegie gave East Orange \$50,000 to found a free library. The town gave a site worth \$22,500, and the municipality voted to furnish \$5,000 a year for its support. Congressman Charles N. Fowler, of Elizabeth, proposed to expend \$100,000 for a library in that city. Assistant-Postmaster-General William M. Johnson, of Hackensack, gave a \$40,000 library to that town. The Paterson library was the first free public library in the State, and \$20,000 was expended on the building during the year. This is a memorial to Charles Danforth, and the gifts continued by his daughter, Mrs. Mary Ryle, amount to \$90,000. Hoboken has a new building and about 25,000 volumes. The family of Dr. William Sticker have given Orange a \$100,000 library. A new library building is in process of erection in Newark; its cost will be \$400,000, and it will be thoroughly equipped with modern facilities. Jersey City is expending \$265,000 on a new library. Trenton is about to expend \$100,000 in a free library. Burlington has the oldest library in the State, for its charter comes down from the time of George II. Its first patron was Gov. Bloomfield, who gave a building for it in the rear of his house. Meantime the free traveling library is receiving much attention, and rural communities are getting their share. There are 48 of these, 30 of which traveled through 44 townships.

Railroads.—The following are the figures of the State Board of Assessors concerning valuation and tax of railroads in the State: Pennsylvania system—valuation, \$63,388,389; tax for State uses, \$316,941.94; tax for local uses, \$101,654.62; total tax, \$418,596.56. Central of New Jersey system—valuation, \$46,512,090; tax for State uses, \$232,563.45; tax for local uses, \$76,371.27; total tax, \$308,934.72. Philadelphia and Reading system—valuation, \$9,524,329; tax for State uses, \$47,620.65; tax for local uses, \$6,518.54; total tax, \$54,140.19. Erie system—valuation, \$20,180,569; tax for State uses, \$100,902.84; tax for local uses, \$66,378.42; total tax, \$167,281.26. Delaware, Lackawanna and Western system—valuation, \$39,901,229; tax for State uses, \$66,378.42; total tax, \$274,826.86. New York, Susquehanna and Western system—valuation, \$7,511,935; tax for State uses, \$37,559.68; tax for local uses, \$7,762; total tax, \$45,321.68. Lehigh Valley system—valuation, \$19,888,008; tax for State uses, \$99,440.04; tax for local uses, \$39,449.75; total tax, \$139,889.79. Railroads not classified—aggregate assessed valuation, \$16,477,100; tax for State uses, \$82,385.50; tax for local uses, \$43,635.37; total tax, \$126,020.87. Totals—aggregate assessed valuation, \$223,384,249; tax for State uses, \$1,116,921.24; tax for local uses, \$417,090.69; total tax, \$1,534,011.93.

Loan Associations.—There are 360 loan associations in New Jersey. The Insurance Commissioner reports that it is very difficult to get full returns of their business. Of the 360, 326 are locals, 12 are State, and 4 are national associations. Four associations were placed in the hands of receivers as the result of the State officials' investigation. According to the report, "the total membership of the associations is 129,131, and they hold 891,803 shares. This is an increase in membership for the year of 7,916 and of 49,832 in the number of shares held. The gross assets of all the associations is \$51,125,050, and the total net

assets, or present worth of the outstanding shares, is \$47,561,890."

Manufactures.—According to the report of the Bureau of Labor, the number of manufacturing establishments considered is 1,738; of these, 934 are managed by private firms and 804 by corporations. The aggregate number of partners comprising the private firms is 1,636, and the stockholders in corporations, 28,774; the partners average in number 1.8 to each firm and the stockholders 35.7 to each corporation. The capital invested in establishments managed by private firms amounts to \$48,761,189, and by corporations \$206,922,361. Average amount of capital owned by partners is \$28,586, and by the stockholders \$7,191. The total amount of capital invested in the 1,738 manufacturing establishments is \$255,689,550. The cost value of all stock or material used is \$200,901,900; the selling value of the goods manufactured is \$355,465,970. The average number of persons employed (male and female) throughout the year is 185,285; the total amount paid in wages is \$76,161,051.

Political.—The Democratic State Convention was held June 1. The platform denounced "imperialism," expressed sympathy for the Boers, favored election of United States Senators by the people, and on State matters declared for reduction of official salaries, abolishment of the fee system, and the placing of all officials on a salary basis; enactment of laws in the interest of organized labor and for the protection of the wage workers of the State; repeal of all laws that abridge the right of juries to fix the amount of damages in cases where the death of a person is caused by wrongful act; and the release of the administration of State affairs from the control of corporations, and their restoration to the authority of the people.

The Republican platform contained this declaration:

"We believe it is the duty of the President of the United States to use all the forces at his command to suppress insurrection wherever the authority of the Government is opposed; and we deprecate and denounce the conduct of recreant Americans who, by abuse of the right of free speech, give aid and encouragement to insurrection and rebellion among peoples owing allegiance to our flag.

"When peace shall have been restored in our new possessions a Republican administration, following the traditions of the party, will give to their peoples a government under such form as will afford them the largest individual participation that their civilization and intelligence will permit."

The platform of the Prohibitionists contained these paragraphs:

"We declare that the nullification of the anti-canteen enactment by the President of the United States under the hypocritical pretense of following the opinion of his legal adviser, Attorney-General Griggs, in behalf of and at the behest of the liquor dealers' association, demands the stern rebuke of every lover of his country and friend of its soldier.

"We deplore as the crime of the age the devastation caused by the liquor traffic following the flag into our newly acquired territory. We hold it to be a monstrous assumption that beer and bullets are means ordained by the will of God in the work of benevolent assimilation of foreign populations to American institutions or for the extension of Christian civilization.

"We denounce the Republican and Democratic parties as the friends, partners, and tools of the organized liquor traffic.

"We hold that the right of suffrage should not be denied on account of sex."

The only State officers voted for were members of the Legislature. That body, in 1901, has a Republican majority of 13 in the Senate and 30 in the House. The Republican candidates for presidential electors received 221,707 votes; the Democratic, 164,808; the Prohibitionist, 7,183; the Social-Democratic, 4,609. Six Republican Congressmen were elected and 3 Democratic.

NEW MEXICO, a Territory of the United States, organized Sept. 9, 1850; area, 122,580 square miles. The population, according to each decennial census, was 61,547 in 1850; 93,516 in 1860; 91,874 in 1870; 119,565 in 1880; 153,593 in 1890; and 195,310 in 1900. Indians, not taxed, in 1900, 2,937. Capital, Santa Fé.

Government.—The Territorial officers in 1900 were: Governor, Miguel A. Otero; Secretary, George H. Wallace; Treasurer, J. H. Vaughn; Auditor, L. M. Ortiz; Adjutant General, William H. Whiteman; Attorney-General, E. L. Bartlett; Superintendent of Education, Manuel C. de Baca—all Republicans. Supreme Court—Chief Justice, William J. Mills; Associate Justices, John R. McFie, Jonathan W. Crumpacker, F. W. Parker, and C. C. Leland; Clerk, José D. Sena—all Republicans.

Population.—The census of 1900 showed the population by counties to be as follows: Bernalillo, 28,630; San Miguel, 22,053; Santa Fé, 14,658; Rio Arriba, 13,777; Valencia, 13,695; Grant, 12,883; Socorro, 12,195; Taos, 10,889; Mora, 10,304; Donna Ana, 10,187; Colfax, 10,150; Guadalupe, 5,429; Lincoln, 4,953; San Juan, 4,828; Otero, 4,791; Chaves, 4,773; Union, 4,528; Eddy, 3,229; Sierra, 3,158.

Finances.—The Territory's 4-per-cent. bonds command a premium; \$45,000 of outstanding bonds were purchased and retired in 1900. The total assessed valuation of real and personal property was \$38,452,181.30; the total Territorial indebtedness, including the bonded and floating debt of the counties, is \$4,178,123.09.

Education.—A direct tax is levied for the support of the public schools, varying from 1½ to 3 mills, annually. Under the operation of the school laws, the illiteracy of the Territory has decreased rapidly. There are 52,652 children of school age, and the total enrollment is 27,173. The number of schools is 576; of teachers employed, 706, whose average monthly pay is \$39.19. The reports show that male teachers are in excess of female teachers, which is hardly true in any other section of the country. Some of the school districts are as large as counties at the East. They are poor and sparsely settled, and they have no industries to be taxed; but every district has its school, and attendance and interest are increasing. In Santa Fé the schools have been crowded.

The following is the report for 1900 of the Presbyterian mission schools at Los Leutes and Pajarito, Valencia County: "The former has 1 teacher who teaches nine months a year, an enrollment of 48, an average daily attendance of 43; value of property, \$600; expenditures during the year, \$512. The Pajarito school has 1 teacher, a school term of nine months, an enrollment of 27, an average daily attendance of 21, a property valuation of \$800, and annual expenditures amounting to \$512."

The United States Government Indian Indian School, at Santa Fé, opened in 1890, is a model in every respect. It became a normal school in 1894. Of the 300 pupils, 218 are boys; 67 per cent. are full-blooded Indians, about 58 per cent. being Pueblos. They are comfortably and neatly

clad, well fed, healthy, and happy. The boys are organized as a military battalion, under military regulations. There are 106 acres in the tract, and much of it is under cultivation. The garden products of the pupils received high prizes at the horticultural fair. On the reservation for Apache Indians, at Jicarilla, the Government is expending large sums for buildings and irrigation.

The Military Institute, at Roswell, is the most successful of the Territorial schools, although it opened only in 1898. The school earned \$11,000 in 1900, and constantly turned away applicants for lack of room. The Territory gives it \$12,000 annually.

The Agricultural College, at Mesilla Park, has had an encouraging year. A deficiency of more than \$8,000 was made up, and much work was done.

The University of New Mexico, at Albuquerque, is flourishing. A new laboratory was dedicated at its commencement, and the original research for which New Mexico furnishes special opportunities will be carried on under better auspices. The School of Mines, at Socorro, is of special value, as New Mexico is a mining State. There are liberal legislative endowments for all these schools.

Penitentiary.—The annual report of the clerk of the First Judicial District says: "The criminal business of this district has been decreasing considerably for the past two years, and it may be more especially noticed in the county of Santa Fé, wherein, on July 1, 1898, 72 criminal cases were pending, while on July 1, 1899, there were but 27, and on July 1, 1900, there were but 22. The same amount of proportionate decrease may be also noticed in the other three counties of this district. At the same time, it may also be noticed that an unusual amount of new business on the criminal side of the docket has been instituted within the past fiscal year, but this is accounted for by the numerous indictments for violation of the liquor and Sunday laws. There were 193 of such cases, and after those are subtracted, the real amount of criminal business in this district has diminished considerably. The small number of cases that have been appealed to the Supreme Court of the Territory from this district shows the high integrity of this court."

There have been many improvements in the working of the Penitentiary. A complete, modern brickmaking plant has been added, at a cost of \$12,000, exclusive of power and the cost of the buildings. The annual report says: "About 100 are received, and about the same number liberated, every year. The number whose sentences will expire this year is 74. The prisoners are comfortably clothed, well fed, and humanely treated. Heretofore the annual appropriation for maintaining the Penitentiary has never been less than \$30,900. The last Legislature reduced this sum to \$30,000. Yet out of this appropriation, after promptly paying employees and all running expenses, the following approximate amounts have been paid out in cash for permanent improvements and facilities: Brick machine, \$5,000; drier, \$8,000; iron in kilns, \$1,500; steam pump and water plant, \$1,000; repairs on buildings, \$700; hospital improvements, \$200; mules and wagons, \$1,400. This leaves money on hand sufficient to add the contemplated new 80 horse-power boiler and the 100-foot brick smokestack to the electric light and brick plants, and continue the system of permanent improvements throughout the institution.

"The old method of punishment known as the 'dark cell' and stringing up by the hands has been abolished, and the 'spanking system' has been substituted therefor. This system has

worked so admirably that it has reduced the number of punishments at least 75 per cent. No convict has so far given cause for being punished a second time after having had a trial dose under this system. It seems that it is not so much the physical punishment as the humiliation that has proved effective. The Penitentiary physician is always present when punishments are administered."

The Marine Hospital.—Congress appropriated \$30,000 for the remodeling of this sanitarium at Fort Stanton. This is additional to the usual appropriation. It will accommodate 200 patients.

The New Capitol.—The new building, for which \$60,000 was appropriated, was dedicated in June.

Mines.—The Governor, in his report, says: "The coal and mining industry is flourishing beyond all precedent. During the year many new properties have been opened, which, along with the great activity in the gold and copper districts, has given a fresh impetus to the construction of railways. In at least four districts throughout New Mexico important petroleum deposits have also been discovered within a few months, which are now receiving merited attention from capitalists."

"The production of coal for the fiscal year was 1,187,334 tons—an increase over the previous year of 138,300 tons—the estimated value of which was \$1,837,165, being an increase in valuation of \$236,577 over the fiscal year ending June 30, 1899. The total number of tons of coke made was 42,803.30. The total number of employees in and about the coal mines is 2,015—an increase of 135 over the previous year. Seven new mines were added to the list of producers during the year. The coal trade has been very brisk. At all the mines the operators were unable to fill more than two thirds of the orders received owing to the scarcity of miners."

"Mines of copper and gold are being developed in a remarkable manner. In this respect the year has marked an epoch in the history of the Territory; never before has there been capital so ready to invest in New Mexico enterprises of this character. Many new districts have opened up good 'pay' properties; old mines have resumed operations, and, with new and approved appliances for extracting the values, the mining industry may justly be said to be exceedingly active throughout the Territory."

Banks and Revenue.—The statements of the different banks throughout the Territory show their resources at the close of the fiscal year to be \$7,426,258.19. For the same period the business of the internal revenue office for the District of New Mexico amounted to \$64,781.07—more than double the receipts of any previous year.

Live Stock.—The cattle inspectors report that the increase in the various sections of the Territory will run from 60 to 90 per cent. for the present year. The improvement in the grade in cattle over all previous years is especially noticeable. There were sold and delivered after Jan. 1, 1900, 86,470 head of cattle; one- and two-year-old steers at \$15 to \$20 a head for ones, and \$18 to \$27 for twos. During the year ending June 30, 1900, 214,053 head, mostly steer cattle, were sold and removed from the Territory, amounting to about \$4,000,000, and during the same period there were brought into the Territory to remain 13,095 head, of which 5,391 were from the republic of Mexico. The greater portion of the stock range is on public domain.

No business offers more profitable returns than does sheep raising and wool growing in New Mex-

ico. There has been vast improvement in the flocks in recent years; the wool grown is diversified, scaling all the way from the finest delaine merino to the coarsest carpet, though the latter is becoming less each year. The total clip for New Mexico for the year was more than 18,000,000 pounds. The number of sheep in the Territory is estimated to be more than 4,000,000. The vast production of wool has resulted in the establishment of other industries, such as wool-scouring and wool-pulling plants and tanneries in various parts of the Territory.

Political.—At the annual election the Republican Territorial ticket was successful by 3,710 plurality and a Republican Delegate to Congress was elected.

NEW YORK, a Middle State, one of the original thirteen, ratified the Constitution July 26, 1788; area, 49,170 square miles. The population, according to each decennial census, was 340,120 in 1790; 589,051 in 1800; 959,049 in 1810; 1,372,111 in 1820; 1,918,608 in 1830; 2,428,921 in 1840; 3,097,394 in 1850; 3,880,735 in 1860; 4,382,759 in 1870; 5,082,871 in 1880; 5,997,853 in 1890; and 7,268,012 in 1900. Capital, Albany.

Government.—The following were the State officers during the year: Governor, Theodore Roosevelt, Republican; Lieutenant Governor, Timothy L. Woodruff; Secretary of State, John T. McDonough; Comptroller, William J. Morgan, who died Sept. 5, 1900, and was succeeded by his deputy, Theodore P. Gilman; Treasurer, John P. Jaekel; Attorney-General, John C. Davies; State Engineer and Surveyor, Edward A. Bond; Superintendent of Public Instruction, Charles R. Skinner; Superintendent of Insurance, Louis F. Payn, whose term of office expired on Feb. 11, when he was succeeded by Francis Hendricks; Superintendent of Banking Department, Frederick D. Kilburn; Superintendent of State Prisons, Cornelius V. Collins; Superintendent of Public Works, John N. Partridge; Commissioner of Labor Statistics, John McMackin; Railroad Commissioners, Ashley W. Cole, George W. Dunn, and Frank M. Baker; Chief Judge of the Court of Appeals, Alton B. Parker; Associate Judges, John C. Gray, Denis O'Brien, Celora E. Martin, Edward T. Bartlett, Albert Haight, and Irving G. Vann, together with Judson S. Landon, William E. Werner, and Edgar M. Cullen, who are judges of the Supreme Court, and were designated by the Governor, on Jan. 1, 1900, to sit in the Court of Appeals.

The term of the State officers is two years. They are elected in November of even-numbered years. The Legislature meets every year in January.

Finances.—The Comptroller, William J. Morgan, died on Sept. 5, 1900, and was succeeded by Theodore P. Gilman, Deputy Comptroller, who then continued in office until the close of the year. According to the report issued by Mr. Gilman, the balance in the treasury on Oct. 1, 1899, was \$4,504,814.74; receipts from all sources, \$32,006,883.51; total, \$36,511,098.25. The payments were \$29,221,895.70, leaving a balance in the treasury on Sept. 30, 1900, of \$7,289,802.55, distributed as follows: Canal fund, \$1,190,632.36; school fund, \$440,370.07; general fund, \$5,280,134.63; and trust and miscellaneous funds, \$378,665.49. The State tax rate was 1.96 (the lowest, with one exception, in over forty years), compared with 2.49 in 1899 and 2.08 in 1898. It was distributed as follows: General, including care of insane, 0.08; school, 0.76; canal, maintenance, 0.21; canal, payment of debt, 0.13; canal, extraordinary repairs and new work, 0.18; total tax levy, 1.96 mill. This tax on the estimated valuation of property in the State of \$5,461,302,756 will realize as follows: General

purposes, including care of insane, \$3,713,685.87; free schools, \$4,150,590.09; maintenance and repairs of the canals, \$1,146,873.58; payment of canal debt, \$709,909.36; extraordinary repairs and new work, \$983,034.50; total, \$10,704,153.40. The revenue from indirect sources for the year is estimated at \$13,013,100.00. It was not necessary this year for the State to borrow money to pay expenses of the government.

Valuation.—The State assessors during the year were J. Edgar Leaycraft, George I. Priest, who were appointed on April 3, 1899, and Lester F. Stevens, appointed on Jan. 10, 1900. The report of the commission for 1900 shows an increase in the assessed value of real estate of \$397,744,563, and a decrease in the personal property subject to local taxation of \$12,838,635; also that the total equalized value of real and personal estate has increased over that of last year by \$384,905,928. This increase of \$384,905,928 in the assessed value of property is largely due to advances in valuations made in New York and Richmond Counties, and to growth in all the counties comprising the city of New York. The increase of values found by the local assessors in metropolitan counties decreases the proportion of direct taxation for State purposes to be borne by the other counties. The figures show very nearly seven and one half times as much of direct taxation imposed upon real estate as upon personal property.

Legislative Session.—The session of the Legislature began on Jan. 3, 1900, and continued until April 7, 1900. As elected, the Senate consisted of 27 Republicans and 23 Democrats and the Assembly of 92 Republicans, 56 Democrats, and 1 Independent Democrat, with 1 vacancy caused by death.

Timothy E. Ellsworth was continued as President *pro tem.* of the Senate, and Samuel F. Nixon was again chosen Speaker of the Assembly. Of the bills passed by the Legislature, 775 were approved by the Governor.

Among the more important measures that received the signature of the Governor were the following:

Authorizing the State to cede to the United States Government a part of Hart's island, in the harbor of New York, for a lighthouse and signal station.

Appropriating \$80,000 for the Quarantine Commission for reclaiming land and erecting a building for cabin passengers at Hoffman island.

Providing for an additional justice of the city court of New York city and additional attendants.

Defining the jurisdiction of the commissioners of deeds within the Greater New York and ratifying certain acts performed by them.

Appropriating \$39,000 for expenses incurred in the prosecution of the violators of the election law in the metropolitan election district, the Gardiner investigation, and the Brooklyn Rapid Transit investigation.

Amending the election law to provide that inspectors of election in New York city shall receive \$7.50 for each registration day and revision of registration for special elections; \$7 for Election Day and \$5 for count of votes; poll clerks shall receive the same as inspectors for count of votes, and ballot clerks \$8 each.

To permit the county treasurer of any county and the comptroller of New York city, with the consent of the State Comptroller, to settle transfer tax suits on certain estates.

Authorizing New York city to raise \$10,000 to pay the back salary or per diem compensation of city employees who enlisted in the army or navy during the war with Spain to which they would

have been entitled if they had remained in the employ of the city.

Providing that chattel mortgages shall be filed in Greater New York as follow: In the borough of Brooklyn, in the office of the county clerk of Kings; in Queens, in the office of the county clerk of Queens; in Richmond, in the office of the clerk of Richmond County; and in the borough of Manhattan and the Bronx, in the office of the register of the city of New York.

Giving to New York city authority to construct sewage-disposal plants.

Amending the law providing for the construction of a bridge over the Harlem river from 145th Street, borough of Manhattan, to East 149th Street in the borough of the Bronx, at a cost of \$500,000.

Making it a misdemeanor to violate any of the provisions of the act relating to inspections of steam boilers and licensing of engineers in New York city.

Exempting the New York Society for the Prevention of Vice from taxation.

Removing the limit of appropriation to be made by New York city for the public library in Bryant Park.

Authorizing New York city to expend \$300,000 to improve that portion of Bronx Park set apart for the New York Zoological Society when the society shall have raised or expended \$200,000 for similar purposes.

Authorizing the expenditure by New York city of \$350,000 for equipping the buildings occupied by the American Museum of Natural History in Central Park.

Authorizing New York city to expend \$200,000 on the Zoological Gardens.

Authorizing New York city to appropriate \$50,000 to aid in the erection of a monument in memory of the prison ship martyrs.

Appropriating \$25,000 for a monument in Brooklyn to the memory of those who died in the British prison ships in New York harbor during the American Revolution.

For the turning over of the Homœopathic Hospital in Brooklyn to the city of New York, and compelling the city to maintain it as a public hospital.

Authorizing the acquisition of adjacent territory to form a Greater Troy.

Incorporating the city of Cortland.

Ceding to the United States Government jurisdiction over certain lands under the waters of Lake Erie at Buffalo.

Amending the liquor tax law by making more stringent the penalties for evasions.

Amending the banking law in relation to the appointment of a corporation as guardian of an infant.

Amending the criminal code so as to provide that upon a trial for murder or manslaughter, if the act complained of is not proved to be the cause of death, the defendant may be convicted of assault in any degree constituted by the act and warranted by the evidence.

Amending the election law by providing for additional ballot boxes at town meetings.

Amending the membership corporations law to provide that the body of a widow may be buried in a burial lot of which her husband died possessed and in which his heirs continue to have right of burial, without consent of any person claiming an interest in such lot.

Providing that the Appellate Division of the Supreme Court may order the reversal of a judgment where it is contrary to the weight of evidence.

Amending the religious corporation law to provide that the trustees of Protestant Episcopal churches shall not make application to court for leave to sell or mortgage any of their real property without consent of the bishop and standing committee of the diocese.

Abolishing coroners' fees for inquests, but providing for fees for the drawing of decisions in a coroner's jury case.

Giving a surrogate the power to determine the sufficiency of the bonds of guardian.

Amending the labor law by requiring hotel and restaurant proprietors to furnish seats for waitresses.

Providing that any agricultural society, club, or exposition which shall permit the use of any gambling outfit on fair grounds shall forfeit the moneys received from the State under the agricultural laws.

Prohibiting persons from transacting business in this State under an assumed name unless they shall file with the county clerk a certificate setting forth the name to be used.

Securing equal rights to colored children in the public schools, and abolishing separate schools.

Appropriating \$50,000 to continue the promotion of sugar-beet culture.

Prohibiting the sale of impure, adulterated, colored, or unwholesome cream.

Relative to experiments, at the experimental stations, in the application of poison and spraying mixtures to fruit trees while in bloom.

Furnishing life-saving apparatus and appliances along the shores or banks of streams in cities, towns, and villages.

Redistricting the State into three sections, to be known as the eastern, western, and middle sections, providing for a new State Board of Examiners of Pharmacy, and regulating the drug trade generally.

Appropriating \$100,000 for the erection of the New York State Building at the Pan-American Exposition.

Abolishing the office of State Superintendent of the Adirondack Land Survey.

Appropriating \$250,000 for continuing the acquisition of land in the Adirondack Park, and for the extension of the Forest Preserve.

Authorizing the State Engineer and Surveyor to continue to co-operate with the Director of the United States Geological Survey in making a topographical survey and map of the State, and appropriating \$20,000 therefor.

Appropriating \$50,000 for the establishment of a State hospital in the Adirondacks for treatment of incipient pulmonary tuberculosis.

Extending to all honorably discharged soldiers and sailors of the United States the provisions of law appropriating public money for burial which have heretofore been applicable to civil war and Mexican War veterans only.

Appropriating \$51,534 for new buildings and improvements to the New York State Woman's Relief Corps Home, at Oxford.

Permitting the establishment of pleasure resorts on reservoir lands and islands owned by the State, with the consent of the State Land Board.

Appropriating \$3,500 for the improvement and care of lands known as the "Stony Point Peninsula."

Appropriating \$15,000 for the acquisition of lands by the State Comptroller to commemorate the battle of Lake George.

Authorizing the New York, Gettysburg, and Chattanooga Battlefield Commission to locate the positions where the Forty-sixth, Fifty-first, and Seventy-ninth Regiments, New York Infantry,

and Battery L, Second New York Light Artillery, fought at the siege of Vicksburg, for the purpose of erecting suitable monuments, and appropriating \$1,000.

Making an additional appropriation of \$5,000 for the equestrian statue of Major-Gen. Henry W. Slocum, to be erected on the Gettysburg battlefield.

Appropriating \$11,000 to erect a bronze group of statuary, representing Reconciliation, on Look-out mountain.

Appropriating \$1,000,000 for improvements at the State hospitals for the insane.

Repealing the section of the penal code which permitted a woman convicted of felony to be sent to a reformatory for women when the sentence was less than one year, and further amending the code by providing that a woman between fifteen and thirty years of age may be sent to a reformatory.

Making it a misdemeanor for any unauthorized person to wear badges of the Military Order of Foreign Wars of the United States or the badge of Spanish War veterans.

Providing \$50 fine for a first offense and \$150 fine for subsequent violations for watering milk furnished to butter and cheese factories conducted on the co-operative plan.

Making it a misdemeanor to stamp collars and cuffs as linen unless they are made of that material.

Making it a misdemeanor to manufacture gunpowder or any other explosive in a dwelling house.

Making it a misdemeanor to sell or give a toy pistol in which blank cartridges are used to any person under sixteen years of age.

Making it unlawful to possess the plumage or skins of wild and song birds for commercial purposes.

Providing that deer shall not be taken at any other time than between daylight and sunset on Long Island, on the first two Wednesdays and the first two Fridays of November.

Providing that on our northern water boundaries, including the Great Lakes and the St. Lawrence River, no nonresident shall take any kind of fish or game within our boundary line unless residents of this State may lawfully take the same kind of fish or game in the waters within the boundaries of the place where such nonresident lives.

Providing that any person who shall omit, neglect, or refuse to obey a subpoena issued by the State Superintendent of Elections or his chief deputy is guilty of a misdemeanor, and one who makes a false statement is guilty of perjury.

Providing that the enrollment of voters at primaries shall be secret, and that the enrollment blanks shall be distributed in envelopes.

Providing that any person who solicits from a candidate for an elective office money or other property as a consideration for a newspaper or other publication supporting any candidate for an elective office is guilty of a misdemeanor.

Providing that the election of committeemen to fill vacancies in nominations shall take place at the primaries and not at a party convention.

Compelling the publication of lists of tax exemptions in the cities by the local assessors. The assessors' statements must show separately such piece or parcel of real estate exempted, the name of the owner, its value, and the reasons for the exemption.

Amending the tax law so as to provide that every foreign banker doing business in the State shall pay an annual tax to the Treasurer of 5 per cent. on the amount of interest earned on money loaned.

Fixing the salary of the members of the State Board of Tax Commissioners at \$5,000 each, au-

thorizing a secretary at \$3,500 and six special agents.

Amending the taxable transfer act relative to the refunding of moneys which the courts have held to have been erroneously assessed by the State.

Appropriating \$49,350 for the expenses of the State Tax Commission in performing duties connected with the franchise tax law.

Providing that when taxes levied on a cemetery lot remain unpaid for five years, the amount, with interest, shall be a lien on the unused portion of the lot.

Incorporating the New York State Medical Association.

Providing that stockholders owning two thirds in amount of a corporation's capital stock may vote to extend its existence.

Permitting the granting of liquor tax certificates to the Pullman Palace Car Company and other foreign corporations.

On April 3 the Legislature met in joint session to elect a Regent of the University to fill the vacancy caused by the death of the Rev. Sylvester Malone, and chose the Rev. Thomas A. Kendricks by a vote of 83 against 53 cast for Bishop Thomas M. A. Burke.

Taxation.—A committee appointed by the Legislature to investigate the tax question, with a view of adopting a plan by which the taxes could be more equitably distributed, resulted in the following recommendations: 1. A State tax of 5 mills upon indebtedness secured by mortgage upon corporate and individual real property. 2. That if the proposed mortgage tax for State purposes is adopted, mortgages ought to be exempted altogether from local taxation, and that the tax should cover all mortgages on real estate within this State, whether made by corporations or by persons, or whether owned by residents or nonresidents, and without exemptions, except in the single case of mortgages made to the Commissioners of United States Deposit Fund. No owner of a mortgage debt ought to be allowed to deduct his indebtedness because the rate is low compared with the rate which the owner of real estate must pay, and which the owner of other personality is liable to pay. 3. A tax of 1 per cent. upon the stock of national and State banks and trust companies, the value of the share to be ascertained by adding together the capital stock, surplus, and undivided profits of such institutions, and deducting therefrom the assessed value of their real estate, which is to continue to be assessed locally. 4. The 1-per-cent. tax upon the institutions named will realize \$3,000,000, and, taken together with the mortgage tax, will furnish to the State, together with its present revenue, about \$23,000,000, which sum is adequate for the support of the State Government. The shareholders in State and national banks and trust companies should not be taxed for local purposes, nor should any deduction from the value thereof be allowed because of the debts of the individual owner.

Banks.—The superintendent's report for the year ending Sept. 30, 1900, shows that the total resources of the institutions, as given by their reports, are as follow: Banks of deposit and discount, Sept. 4, 1900, \$351,080,252; savings banks, July 1, 1900, \$1,037,869,160; trust companies, July 1, 1900, \$796,483,887; safe deposit companies, July 1, 1900, \$5,297,905; foreign mortgage companies, Jan. 1, 1900, \$5,236,422; building and loan associations, Jan. 1, 1900, \$66,034,789; total, \$2,262,002,415. This is an increase of \$115,018,554 over last year. The number of savings banks was diminished by one during the year.

Census.—The following shows the population of the State by counties, as determined by the national census of 1900, compared with the population for 1890:

COUNTIES.	1890.	1900.	Increase.
Albany.....	164,555	165,571	1,016
Allegany.....	43,240	41,601	*1,789
Broome.....	63,973	69,149	6,176
Cattaraugus.....	60,866	65,648	4,777
Cayuga.....	66,802	66,334	932
Chautauqua.....	75,302	88,314	13,112
Chemung.....	48,265	54,068	5,798
Chenango.....	37,776	36,563	*1,213
Clinton.....	46,437	47,430	993
Columbia.....	46,172	43,211	*3,961
Cortland.....	28,637	27,676	*1,081
Delaware.....	45,496	46,413	917
Dutchess.....	77,879	81,670	3,791
Erie.....	322,981	433,686	110,705
Essex.....	33,052	30,707	*2,345
Franklin.....	38,110	42,853	4,743
Fulton.....	37,650	42,542	5,192
Genesee.....	33,365	34,561	1,296
Greene.....	31,598	31,478	*120
Hamilton.....	4,782	4,947	185
Herkimer.....	45,608	51,049	5,441
Jefferson.....	68,806	76,748	7,942
Kings.....	388,547	1,166,582	338,035
Lewis.....	29,806	27,427	*2,379
Livingston.....	37,801	37,059	*742
Madison.....	42,892	40,545	*2,347
Monroe.....	189,586	217,354	28,368
Montgomery.....	46,699	47,488	1,789
New York.....	1,515,301	2,060,600	535,299
Nassau.....	55,448	55,448	.....
Niagara.....	63,491	74,961	12,470
Oneida.....	123,922	132,800	9,878
Onondaga.....	146,247	168,735	22,488
Ontario.....	48,452	49,606	1,152
Orange.....	97,859	108,339	8,000
Orleans.....	30,808	30,164	*639
Oswego.....	71,883	70,381	*1,002
Otsego.....	50,861	48,989	*1,932
Putnam.....	14,449	13,737	*1,062
Queens.....	128,069	152,999	24,940
Rensselaer.....	124,511	121,097	*2,814
Richmond.....	51,693	67,021	15,328
Rockland.....	35,162	38,298	3,136
St. Lawrence.....	86,048	89,068	4,035
Saratoga.....	57,663	61,089	3,426
Schenectady.....	29,797	46,353	17,055
Schoharie.....	20,164	26,354	*6,190
Schuyler.....	16,711	15,811	*900
Seneca.....	28,227	28,114	*113
Steuben.....	81,473	82,832	1,340
Suffolk.....	62,491	77,682	15,091
Sullivan.....	31,031	32,306	1,275
Tioga.....	29,925	27,951	*1,984
Tompkins.....	32,923	33,330	907
Ulster.....	37,062	38,422	1,360
Warren.....	27,866	29,943	2,077
Washington.....	45,690	45,624	*66
Wayne.....	49,729	48,660	*1,069
Westchester.....	146,772	183,375	36,603
Wyoming.....	31,193	30,413	*780
Yates.....	21,001	20,818	*683
Total.....	5,997,853	7,307,407	1,270,150

* Decrease.

+ Created in 1896.

Insurance.—The annual report showed 253 fire, marine, life, and casualty companies doing business, with assets of \$1,943,004,411, and liabilities, except capital stock, of \$1,515,309,737, and capital stock of \$105,122,017. These companies reported a surplus of \$353,326,119, and risks in force \$32,925,249,575. There are 55 fraternal beneficiary societies which show receipts of \$33,074,648, and disbursements of about \$31,000,000. Fifty-three nonfraternal associations show receipts of \$11,382,831, payments for claims \$7,956,803, and for expenses \$3,398,026. The work of the department is constantly on the increase, and unusual efforts are necessary in order to protect the rights of the policy holders and members of beneficiary associations.

Excise.—The commissioner's annual report gives the following items for 1900: Amount collected, \$12,622,957; expenses of the department,

\$280,995; number of certificates of all kinds issued during the fiscal year, 31,530; number of certificates in force Sept. 30, 1900, 27,747; ratio of expense collection to gross amount collected, 2.66 per cent. Besides the transactions of the fiscal year, the report gives a review of excise matters for the past five years, and briefly discusses the question of liquor traffic and legislation bearing thereon in the past. It gives results of prohibitory laws in States where the same have been tried, compared with high license; gives extracts from colonial statutes showing that the people of the State are wrestling with the very same questions and difficulties as their ancestors in trying to restrict the trade in the interest of good order and morals. The report also says: "The law has from time to time been amended to meet apparent defects, more particularly in its administrative features, until it is now working smoothly and satisfactorily. No radical change in its main features or general scope has been made, nor are any such changes desirable."

Education.—The superintendent's report for 1900 shows that there was expended in support of the public schools \$33,421,491.37, an increase over the previous year of \$5,368,500.88, about \$4,500,000 of which is shown in New York city alone. There was paid for teachers' salaries \$19,218,898.63, and the average annual salary paid to teachers was \$604.78. There were employed 31,768 teachers, an increase of 1,269. Of the 1,569,653 pupils of school age residing in the State, 1,200,574 attended public schools some part of the year and 163,946 attended private schools. This shows that 88 per cent. of all children of school age in this State attended either a public or a private school some part of the year. The report shows that there were 217 fewer men employed in the teaching force of the State than during the previous year, while there were 1,703 more women. The increase in the value of school property is reported as \$6,614,880. The entire public school property is valued at \$81,768,493. The annual report of the State Board of Regents shows that the total number of schools was 705, of which 104 are incorporated academies, 565 high schools and academy departments. During the year ending July 31, 1900, 24 academic departments were admitted, and 6 academies were chartered. The number of secondary schools has increased 110 per cent. in the past ten years. There were employed in secondary schools 1,369 men and 2,519 women. There were 34,105 boys and 42,260 girls instructed in secondary institutions, a total of 79,365 students, which was an increase of 9,589, or 13.7 per cent. The total property of secondary schools is \$28,412,184, and the expenditures by the schools during the year was \$6,036,374. The total amount apportioned to secondary schools was \$212,667 and 672 schools took examinations, while 511,020 examination papers were written, of which 345,117 were accepted, 29,275 being rejected. The report of the public library division contains returns from 1,035 libraries. Of these 460 free for lending to the public and containing 2,187,125 volumes, circulated last year 8,402,445 volumes. The free libraries lent to the people an average of 23.157 books daily, 1,163 for each 1,000 of the population, 387 for each 100 books in the libraries.

Charities.—These are under the care of a board, whose annual report is prepared from the sworn statements filed by the treasurers or other responsible officers of the charitable institutions, societies, and associations subject to the board's supervision. This board consists of 12 members. During the year the board visited and inspected all the institutions, societies, and associations, more

than 500 in number, within its jurisdiction, pointing out to the authorities of such institutions any evils, defects, or abuses requiring remedy, the result of which has been the improvement of several hundred public and private charitable institutions; and the board reports that for the most part such institutions are in good condition, comparatively free from serious evils, and rendering beneficent public service. An important feature of the work is that which relates to institutions for the care of dependent children. There are 122 such in receipt of public moneys, and their inmates number nearly 30,000. More than 15,000 children were discharged from such institutions during the year.

Prisons.—According to the Governor's message, the number of prisoners confined in various prisons during the year averaged 3,376. The expenditure for their maintenance was \$460,528.02. A larger appropriation for care and maintenance will be required for 1901, as the Eastern New York Reformatory, at Napanoch, will come under the charge of the department. It has been found that approximately 1,600 prisoners have been engaged in productive industries. The others have been employed, but not upon productive industry. The superintendent reports the structures at Sing Sing and Auburn as unsanitary, and in such condition as to prevent the application of a comprehensive scheme of gradation and classification of the prisoners, and the attainment of reformatory results that might be obtained if proper buildings were provided. The Bertillon system of measurement, which has been perfected under the present superintendent, not only renders it much easier to detect and identify a criminal who has previously served a term of imprisonment, but also makes possible the enlargement to a greater degree of the scope of the law which was passed last year, permitting judges to fix indeterminate sentences.

Labor Statistics.—The commissioner's report shows that at the close of 1899 there were 224,383 trade-union members in the State, an increase of 49,360. In Greater New York there were 152,860 union members, against 125,136 in 1898. Regarding labor laws, the report says that New York is well to the front, and probably in advance of other States in regard to the eight-hour work day and the prevailing rate of wages for public employees or employees of contractors on public works. The New York State Free Employment Bureau, at 30 West 29th Street, did an increased business in the year. In the last quarter the number of applicants for work was 1,420, and for help 714. Employment was procured for 598 persons, an increase of 22 per cent. The number of immigrants to the United States in the last quarter of 1899 through the port of New York was 74,892, an increase of 23,012 over the corresponding quarter for 1898.

Public Works.—The report of the State Engineer and Surveyor shows that one of his principal duties was the making of a survey and plans and estimate for a barge canal across the State, for which \$200,000 was appropriated. This survey was completed, and the results will be presented to the Legislature in February, 1901. The topographical survey of the State was continued in co-operation with the United States. The results are published in sheets 12 by 18 inches, showing about 12 miles by 13 miles, so that 240 sheets will cover the State. Of these, 102 are completed and published, 15 sheets are mapped and in the hands of the engravers, 26 are surveyed and in the hands of draughtsmen, and of the remaining 97 three quarters are triangulated and are ready to be surveyed. The State Engineer also had charge of the

survey, design, and construction of good roads under the Higbie-Armstrong law of 1898, under which law \$250,000 has been appropriated, during the three years it has been in force. Twenty-three roads have been built in 12 counties, aggregating 53½ miles. In addition, 131 petitions have been received from 27 counties for an aggregate of 800 miles, of which surveys and estimates have been made or are in progress; for 80 roads in 23 counties, aggregating 406 miles, and showing an average estimated or actual cost of \$7,625 a mile.

Canals.—The Superintendent of Public Works, in his report for 1900, shows that his policy of reconstructing the towing path by grading, graveling, and rolling, was continued during the year, with the result that the towing path from end to end of the Erie and Champlain Canals is in better condition than for many years. The Legislatures of 1899 and 1900 made appropriations authorizing a large number of improvements, such as the construction of bridges and the building of dikes, and the superintendent has succeeded in getting almost all this special work either completed, under way, or under contract to be completed at an early date. The department has under construction extensive bridges of the latest design at Waterford, West Troy, Minden, Utica, Rome, Syracuse, Rochester, Lockport, and other places. Some of these bridges call for an expenditure of more than \$75,000. The superintendent, as a member of the Canal Board, devoted much time to the consideration of claims against the State growing out of the \$9,000,000 canal improvement, and also to the running down of the marauders who have made a business of destroying State property that they might profit by patronage of the forces engaged in making the repairs. He secured the indictment of 15 men, most of whom have been tried and convicted.

The canal season of 1900 closed officially at noon on Dec. 1. The season was not as good as that of 1899, when 3,686,551 tons of freight, with a value of \$92,786,712, were carried. A survey for a canal to cost approximately \$82,000,000 was carried on under an appropriation of \$200,000. A large number of civil engineers, levelers, rodmen, chainmen, borers, and helpers were selected under the civil service rules, and specially prepared instructions for survey parties were prepared and recommended by a board of distinguished engineers, of which George S. Greene, Jr., was chairman.

Fisheries, Forests, and Game.—A. N. Cheney, State fish culturist, acting under the direction of the commission, distributed in the various waters 219,135,198 fish, as follows: Whitefish, fry, 40,175,000; tomcod, fry, 42,000,000; pike perch, fry, 50,525,000; frost fish, fry, 3,495,000; lobsters, fry, 2,400,000; muskellunge, fry, 1,200,000; wall-eyed pike, fry, 300,000. Brook trout, fry, 3,581,000; fingerlings, 152,983; yearlings, 95,225; two and three years old, 400. Brown trout, fry, 1,091,000; fingerlings, 108,253; yearlings, 48,825. Rainbow trout, fry, 120,000; fingerlings, 98,109; yearlings, 40,000. Lake trout, fry, 3,772,500; fingerlings, 201,900; yearlings, 13,355. Red throat trout, fingerlings, 62,750; yearlings, 38,800. Land-locked salmon, fry, 2,400; yellow perch, fry, 4,900; shrimp, fry, 20,000; black bass, small mouth, 300. Shad, Hudson river (from the United States), 10,280,000; hatched at Catskill, 2,870,000; hatched at Long Island, 565,000. Total, 168,262,900. Eggs and fish fry and yearlings were furnished by the United States Fish Commission as follow: Eggs, 420,000; fish fry, 50,428,000; yearlings, 23,498. Total, 50,872,298.

In 1900 the State acquired title by purchase to

105,229.37 acres in the forest preserve, and 1,901.25 acres by reinstatement of canceled tax sales, and lost by cancellation and redemption 736.66 acres, leaving an aggregate holding at the close of the fiscal year of 1,307,067.70 acres. Of this, 1,290,987 acres are in the Adirondack preserve. The average price for the purchases was \$3.04 an acre. To locate and secure the tract of 30,000 acres to be used by the State College of Forestry, \$2,065.54 was expended. In 1900 the game protectors destroyed 2,615 illegal devices for the capture of fish and game, which were valued at \$30,412.35, and the department prosecuted 357 offenders against the fish and game laws, securing 336 convictions. There were also 53 cases of trespass on State lands, which were taken into court and convictions secured.

Railroads.—According to the report of the commissioners for 1900, the steam surface roads earned in the gross \$27,060,056 more than in 1899, and their net earnings were \$10,242,410 more than in 1899. The capital stock increased \$22,144,400 over that of 1899; funded debt increased \$3,584,498.50 over that for 1899. The percentage of dividends to capital stock was 2.52, compared with 2.43 in 1899. The average freight earnings per ton per mile increased 0.013 cent, and the average freight expenses per ton per mile decreased 0.007 cent. The number of accidents on the lines of steam surface railroads was 671 killed and 1,374 injured. The number of passengers carried was 73,846,114, and one passenger was killed for every 9,230,764 carried. The number of passengers carried on all the street surface railroads, including the few remaining horse railroads and the elevated roads in Brooklyn, was 1,801,974,097, an increase of 122,684,693. The number carried in the boroughs of the Bronx and Manhattan, including transfers, was 567,144,099, an increase of 57,829,283. The number carried in Brooklyn, including transfers, and including those that were carried by the elevated railroads, was 323,229,639, an increase of 45,584,744. The total number of passengers carried by the Manhattan Railway was 184,164,110, an increase of 9,839,535. Fifteen passengers were injured and 4 employees killed on the Manhattan Elevated Road, while 148 persons were killed and 650 injured on the street surface roads. The average number of persons employed on all the street surface railroads, including the elevated railroads in Brooklyn, was 28,075; and the aggregate amount of salaries and wages paid them was \$16,968,907.05. The companies owned or operated 5,098 electric and cable box cars, 3,666 electric and cable open cars, 23 air motor box cars, 22 electric mail cars, 626 electric and cable freight, express, and service cars. There were 2,437 other cars in operation.

Insane.—The care of the insane is in the charge of a commission that consisted of Peter M. Wise, president (who was removed by Gov. Roosevelt on Dec. 20 for malfeasance in office), William C. Osborn, and William L. Parkhurst. Their report shows that on Oct. 1, 1900, there were 22,088 inmates in the State hospitals, against 21,435 in 1899. The expenditures for maintenance of the State hospitals for the year was \$3,599,631.56, or at the rate of \$165.38 per capita, against \$178.42 for 1899. This decrease was brought about by reduction in the number of employees, and has not caused any serious impairment in the proper administration of the hospitals. The total expenditure for construction work and repairs during the year was \$662,948.90. The commission reported that they have \$20,000,000 invested in buildings and equipments. The commission returned to their homes in other States and countries 115 non-

resident and alien patients, at a cost of \$4,541.56. The commission has collected \$122,860.49 from the relatives of insane patients liable for their support, and, in addition, has received from private or so-called "bond" cases \$87,333.13.

National Guard.—The Adjutant General reported at the close of the year that all organizations of the National Guard and Naval Militia were well equipped for active service with the exception of the hospital corps of the various commands, and the supplying of this branch of the service with the best obtainable equipment was being rapidly advanced. Gen. Charles F. Roe reported the aggregate strength of the National Guard on Sept. 30, 1900, to be 14,251, divided as follows: Commissioned officers, 855; enlisted men, 13,396. His report says: "A grand total of 10,045 enlisted men and seamen qualified in general and supplementary practice, the same being 83.74 per cent. of the number practicing. The condition of the Guard is much improved since the last report, with the exception of a few organizations. The attention paid to the detailed work, books, and internal discipline is marked. The performance of field service and practice marches by the organizations in camp this year was satisfactory. Capt. J. W. Miller, commanding the Naval Militia, reports that he is able to say that the city of New York has decided to construct an armory on the Brooklyn water front at the foot of 43d Street. The plans for this armory are now being considered by the city authorities, and a portion of the building will be erected during the winter. With some reluctance and after full consideration, and with the approval of the Governor, it was deemed advisable last summer to forego the tour of duty on the vessel provided by the Navy Department for the exercises of the Naval Militias of the various States, and to give our instruction in home waters under our own officers."

Civil Service.—The report of the commissioners for 1899 shows that the number of appointments was 2,652, divided as follows: Exempt class, 124; competitive class, 421; noncompetitive class (attendants, nurses, and similar positions in the State hospitals and institutions), 1,564; after noncompetitive provisional examination, 42; without examination, 501. The number of removals was 304, as follows: Exempt class, 10; competitive class, 48; noncompetitive class, 246. The number of resignations was 1,589, as follows: Exempt class, 59; competitive class, 212; noncompetitive class, 1,318. The number of deaths was 38, divided as follows: Exempt class, 6; competitive class, 24; noncompetitive class, 8. The number of transfers was 40 and the number of promotions 196. The report says: "For the first time since the passage of the civil service law, in 1883, every one of the many cities of the State possesses regularly prescribed rules and a classification of its civil service. On June 16, 1900, the commission extended the rules so as to include places in the civil service of the counties of Erie, New York, Kings, Queens, and Richmond. This action brought under the jurisdiction of the commission about 1,300 employees, making the number of places now subject to the State civil service rules about 9,000."

Historian.—The work of publishing the early records of the State was continued during the year, and in the War of the Revolution Series three volumes of the Public Papers of George Clinton, first Governor of New York, were issued. The first of these contains an introduction by the State Historian, and gives the military papers of Clinton for the years 1775, 1776, and 1777. Vol. II carries the record from June, 1777, to March, 1778, while the final volume ends with papers

dated in September, 1778. On many points of historical interest these papers throw much light, and they add greatly to our knowledge of the participation by the Empire State in the great events of the time of the Revolution. Of corresponding value are the three volumes entitled New York at Gettysburg, by William F. Fox, which constitute the final report of the State's Monument Commission. Illustrations of the monuments are given, and it tells how the New York State monument cost \$60,000. Prior to 1890 \$140,000 had been appropriated for monuments and tablets, together with \$10,000 for sites. In 1890 an appropriation of \$1,525 was made; in 1893-'94, \$77,034; and in 1894 and 1895, \$7,500.

The Palisades.—The commission appointed at the instance of Gov. Roosevelt by the Hon. A. H.



BENJAMIN B. ODELL,
GOVERNOR OF NEW YORK.

Green, president of the Society for the Preservation of Scenic and Historic Places and Objects, to act in behalf of New York State in conjunction with a like commission of New Jersey, appointed by act of Legislature, for the preservation of the Palisades, has accomplished its purpose, and its action is thus reported by Gov. Odell: "I desire to commend to your careful attention the report of the commissioners

of the Palisades Interstate Park, and urge your action on their request for financial support in a spirit of liberality commensurate with the importance of the undertaking and the great public interest therein. I am able to say that the \$10,000 appropriated for the purpose of defraying the expenses of the commissioners and perfecting surveys and maps have been used entirely as the nucleus of a fund for acquiring and closing down the most destructive of the quarries. Blasting at these quarries stopped on Christmas eve, in accordance with the provisions of option contracts binding until June 1 next [1901]. The commissioners are securing options on several miles of the Palisades, and have obtained subscriptions amounting to more than \$120,000."

Lake George Battle Park.—In accordance with an act of the Legislature, the State Comptroller, on Sept. 12, completed the purchase of 25 acres at Lake George. This property includes the site of the old battlefield of the French and Indian War, and is to be added to a plot in the same locality, purchased in 1898 for the purpose of establishing a State park on the historic ground. That property covered about 10 acres, and a substantial house, to be used as a museum, stands upon it. The new purchase transferred to the State cost \$12,100, which amount was covered by an appropriation of \$14,000. A monument in memory of the troops who fell on that field will be erected by the Society of Colonial Wars.

Political.—A Republican State convention was held in Saratoga Springs, Sept. 4-5, which was called to order by Benjamin B. Odell, Jr., who nominated Timothy L. Woodruff as temporary chairman, while for permanent chairman Nevada N. Stranahan was chosen later. The platform

called attention to the continued prosperity of the nation, denied that imperialism was an issue, called attention to the lower tax rate, referred to the advantage of the Raines liquor tax law and of the franchise tax law. The condition of the canals and proposed improvements were discussed; the laws enacted for the just protection of the workman were indicated, the methods by which the interests of the farmers had been fostered were mentioned, and civil service reform, the National Guard, and militia received consideration. The administration of President McKinley and the nomination of Gov. Roosevelt were approved. In closing it contended that, covering the whole period of the seven years of its control of the State Government, the Republican party "points to a record during which the charge of maladministration can not be brought successfully against any of its officials. It is a record of progress and good government; of promises kept, not of pledges broken." The following candidates were then nominated and were chosen by acclamation: For Governor, Benjamin B. Odell, Jr., of Orange; Lieutenant Governor, Timothy L. Woodruff, of Kings; Secretary of State, John T. McDonough, of Albany; Comptroller, William J. Morgan, of Erie; Treasurer, John P. Jaekel, of Cayuga; Attorney-General, John C. Davies, of Oneida; State Engineer and Surveyor, E. A. Bond, of Jefferson.

A Democratic State convention was held in Saratoga Springs, Sept. 11, 12, for selecting candidates for State officers. The meeting was called to order by Frank Campbell, who presented the name of Patrick H. McCarren as temporary chairman. Later George Raines was named as permanent chairman. The platform ratified the nomination for the presidency of William J. Bryan, condemned the ice trust, opposed the increase of State commissions, favored the taxing of probate franchises, denounced the Raines law, condemned the Republican canal policy, urged repeal of the election law for New York city, favored a practical civil service law with preference for veterans, and closed with an appeal to the patriotism and intelligence of the voting population to support, in State and nation, the party whose cardinal principles have ever been "equal and exact justice to all, special privileges to none; peace, commerce, and honest friendship with all nations, entangling alliances with none; home rule, individual liberty, common sense civil service, honest pay for honest toil, and the lowest possible taxation consistent with efficient administration." The nominations for Governor were: John B. Stanchfield, of Chemung; Bird S. Coler, and William F. Mackey, and a ballot showed the following vote: Stanchfield, 294; Coler, 154; and Mackey, 1. The remaining nominations were made by acclamation: Lieutenant Governor, William F. Mackey, of Erie; Secretary of State, John T. Norton, of Rensselaer; Comptroller, Edwin S. Atwater, of Dutchess; Treasurer, John B. Judson, of Fulton; Attorney-General, Thomas F. Conway, of Clinton; Engineer and Surveyor, Russell R. Stuart, of Onondaga.

The election, Nov. 6, resulted in the success of the ticket containing the Republican presidential electors by a vote of 821,992 against 678,386 for the Democratic ticket. On the State ticket, Odell received 804,859 votes against 693,733 votes for Stanchfield. The entire State Republican ticket was elected as nominated except the Comptroller, John J. Morgan, who died on Sept. 5, 1900, and to fill whose place Erastus C. Knight was chosen by the Republican State Committee. Thirty-four Representatives to Congress were elected, and of these 21 were Republican. Of the 13 Democrats chosen, 11 were from New York city, 1 was from

Buffalo, and 1 from Westchester County. A new Legislature was chosen, including in the Senate 35 Republicans and 15 Democrats, and in the Assembly 105 Republicans and 45 Democrats.

NEW YORK CITY. Government.—The city officers during the year were: Mayor, Robert A. Van Wyck; President of the Council, Randolph Guggenheimer; Borough Presidents—Manhattan, James J. Coogan; Brooklyn, Edward M. Grout; Bronx, Louis F. Haffen; Queens, Frederick Bowley; and Richmond, George Cromwell, all of whom are Tammany Democrats and took office on Jan. 1, 1898, except Mr. Coogan, who took office on Jan. 5, 1899. Also there are the following county officers: County Clerk, William Sohmer; Sheriff, William F. Grell; and Register, Isaac Fromme, all of whom are Tammany Democrats and took office on Jan. 1, 1898, except the sheriff, who took office on Jan. 1, 1900.

Finances.—The condition of the debts of the city of New York, including the boroughs of Manhattan, the Bronx, Brooklyn, Queens, and Richmond, on Jan. 1, 1901, is shown in the following statement:

A. FUNDED DEBT OF THE CITY OF NEW YORK AS NOW CONSTITUTED, ISSUED SUBSEQUENT TO JAN. 1, 1898.

1. Payable from the sinking fund of the city of New York under the provisions of section 206 of chapter 378 of the Laws of 1897....	\$39,521,851 85	
2. Payable from the water sinking fund of the city of New York under the provisions of section 10, Article VIII, of the Constitution of the State of New York, and section 208 of chapter 378 of the Laws of 1897.....	10,349,343 00	
3. Payable from taxation...	5,898,335 94	
4. Payable from assessments	1,997,124 08	
5. Payable from the rapid transit sinking fund under the provisions of chapter 4 of the Laws of 1891 as amended.....	1,000,000 00	
		\$58,256,654 87

B. FUNDED DEBT OF THE CITY OF NEW YORK AS CONSTITUTED PRIOR TO JAN. 1, 1898.

Boroughs of Manhattan and the Bronx, City of New York.

1. Payable from the sinking fund for the redemption of the city debt (first lien) under ordinances of the Common Council.....	\$509,200 00	
2. Payable from the sinking fund for the redemption of the city debt (second lien) under the provisions of section 213 of chapter 378 of the Laws of 1897.....	9,700,000 00	
3. Payable from the sinking fund for the redemption of the city debt under the provisions of section 229 of chapter 378 of the Laws of 1897.....	107,273,143 23	
4. Payable from the sinking fund for the redemption of the city debt under the provisions of section 1 of chapter 79 of the Laws of 1899...	9,823,100 00	
5. Payable from the sinking fund for the redemption of the city debt No. 2 under the provisions of the constitutional amendment adopted Nov. 4, 1884, and of section 10, Article VIII, of the Constitution of the State of New York.....	41,977,000 00	
6. Payable from taxation...	21,811,250 00	
7. Payable from assessments	8,602,536 21	
<i>New York County.</i>		
8. Payable from taxation...	9,379,300 00	
		308,075,428 44

C. FUNDED DEBTS OF CORPORATIONS IN THE BOROUGH OF BROOKLYN, INCLUDING KINGS COUNTY, ISSUED PRIOR TO JAN. 1, 1898.

City of Brooklyn, including Annexed Towns.

1. Payable from the sinking fund of the city of Brooklyn under the provisions of chapter 488 of the Laws of 1860 and amendments thereof.....	\$8,697,000 00	
2. Payable from the sinking fund of the city of Brooklyn under the provisions of chapter 573 of the Laws of 1880 and chapter 443 of the Laws of 1881.....	2,350,000 00	
3. Payable from the sinking fund of the city of Brooklyn under the provisions of chapter 648 of the Laws of 1895.....	7,065,567 41	
4. Payable from the water sinking fund of the city of Brooklyn under the provisions of chapter 806 of the Laws of 1869, and acts amendatory thereof and supplementary thereto....	14,095,749 76	
5. Payable from taxation...	24,517,264 98	
6. Payable from assessments	6,397,572 00	

Kings County.

7. Payable from taxation...	13,767,392 88	76,890,666 03
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D. FUNDED DEBTS OF CORPORATIONS IN THE BOROUGH OF QUEENS, ISSUED PRIOR TO JAN. 1, 1898.

Corporations other than Queens County.

1. Payable from the sinking fund of Long Island City for the redemption of revenue bonds under the provisions of chapter 798 of the Laws of 1895.....	\$660,000 00	
2. Payable from the sinking fund of Long Island City for the redemption of fire bonds under the provisions of chapter 122 of the Laws of 1894.....	35,000 00	
Payable from the sinking fund of Long Island City for the redemption of water bonds under the provisions of chapter 759, Laws of 1895.....	19,000 00	
3. Payable from water revenue.....	705,000 00	
4. Payable from taxation...	6,390,316 68	
5. Payable from assessments	1,276,737 80	

Queens County, amount to be borne by the City of New York.

6. Payable from taxation....	3,772,346 39	12,858,450 87
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E. FUNDED DEBTS OF CORPORATIONS IN THE BOROUGH OF RICHMOND, INCLUDING RICHMOND COUNTY, ISSUED PRIOR TO JAN. 1, 1898.

Corporations other than Richmond County.

1. Payable from taxation...	\$1,200,698 28	
<i>Richmond County.</i>		
2. Payable from taxation...	1,624,000 00	2,824,698 28
Total funded debt.....		\$389,905,899 39

TEMPORARY DEBT.

Issued in anticipation of taxes of 1900.....	\$2,107,600 00	2,107,600 00
Total bonded debt.....		\$392,013,499 39

SUMMARY.

Total gross funded debt.....	889,906,899 89
Less amount held by the commissioners of the sinking fund on account of sinking fund No. 1.....	\$81,848,736 88
Less amount held by the commissioners of the sinking fund on account of sinking fund No. 2.....	20,426,828 42
Less amount held by the commissioners of the sinking fund on account of sinking fund of the city of New York.....	1,071,027 90
Less amount held by the commissioners of the sinking fund on account of the water sinking fund of the city of New York.....	303,874 04
Less amount held by the commissioners of the sinking fund on account of the sinking fund of the city of Brooklyn.....	7,640,886 41
Less amount held by the commissioners of the sinking fund on account of the sinking fund of Long Island City for the redemption of revenue bonds.....	330,000 00
Less amount held by the commissioners of the sinking fund on account of the water sinking fund of the city of Brooklyn. Not separated last year from the sinking fund of the city of Brooklyn.....	674,275 86
	112,288,129 01
Net funded debt.....	\$277,617,770 88
Revenue bonds.....	2,107,600 00
Net bonded debt.....	\$279,725,370 88

In the year bonds and corporate stock of the city were issued as follows: For public buildings, \$9,724,309.68; for public parks, \$3,315,196.98; for bridges, \$5,317,000; for repavement and improvement of roads, drives, etc., \$3,010,200; for water supply, \$3,450,000; for docks, \$3,874,705.46; for soldiers' and sailors' memorial arch, \$202,000; for street cleaning, \$50,000; for rapid transit railroad, \$1,000,000; for Police Department, \$136,389.71; for opening and widening streets, \$2,598,211.10; for refunding matured loans, \$700,000; for local improvements, \$17,185.35; for street improvements, \$350,000; special revenue bonds, \$5,388,335.94; a total of \$39,133,534.22. The tax rate adopted by the Municipal Assembly on Aug. 15 was, for Manhattan and Bronx, \$2.24 for each \$100 of assessment. The rate for 1899 was \$2.48. For Brooklyn the rate was \$2.32; Queens, \$2.34; and Richmond, \$2.22.

Board of Estimate and Apportionment.—This body consists of the Mayor, the President and Secretary of the Department of Taxes and Assessment, the Comptroller, the President of the Council, and the Corporation Counsel. This board allowed the following named amounts for 1901: The Mayoralty and Bureau of Licenses, \$63,755; Municipal Assembly, \$200,052; Department of Finance, \$842,305; Law Department, \$399,758; Board of Public Improvements, \$289,500; Department of Highways, \$2,178,144.67; Department of Sewers, \$801,350.67; Department of Bridges, \$431,728.25; Department of Public Buildings, Lighting, and Supplies, \$3,904,809; Department of Water Supply, \$1,525,219.17; Department of Parks, \$1,863,288.45; Department of Public Charities, \$1,895,491.01; Department of Correction, \$758,775; Department of Health, \$1,053,990; Police Department, \$11,938,343.42; Department of Street Cleaning, \$5,001,922.27; Fire Department, \$4,864,485; Department of Buildings, \$546,525; Department of Taxes and Assessments, \$334,450; Board of Assessors, \$42,-

700; Department of Education, \$18,512,817.69; College of the City of New York, \$220,000; Normal College, \$195,000; coroners, \$165,150; Commissioners of Accounts, \$156,000; Board of City Record, \$563,200; libraries, \$299,663.30; local city courts, \$985,250; charitable institutions, \$2,786,011.06; borough officers, \$51,300; miscellaneous, \$987,978.56; fund for street and park openings, \$1,184,553.06; interest on the city debt, \$12,100,206.05; redemption of the city debt, \$10,332,173.18; county expenses (including State taxes)—New York County, \$7,658,704.84; Kings County, \$2,437,945.45; Queens County, \$363,861.71; Richmond County, \$160,056.62; total, \$98,096,413.43.

The total budgets for all boroughs of New York city for 1900 aggregated \$90,778,972.48. The budget for 1901 therefore shows an increase of \$7,317,440.95.

Taxes and Assessments.—These are in the charge of a department, of which Thomas L. Feitner is president. The other members are Edward C. Sheehy, Arthur C. Salmon, Thomas J. Patterson, and Ferdinand Levy (salaries, \$7,000 each). Office, 280 Broadway. They report the total valuations of real and personal property as assessed for taxation in 1900 to be \$3,654,122,193, as against \$3,478,352,029 for 1899. They were distributed as follows: Real estate—Manhattan, \$2,231,502,855; the Bronx, \$138,494,849; Brooklyn, \$551,308,500; Queens, \$104,427,772; Richmond, \$42,723,924; total, \$3,168,547,700. Personal property—Manhattan, \$421,860,527; the Bronx, \$8,013,641; Brooklyn, \$43,937,440; Queens, \$55,498,681; Richmond, \$6,246,204; total, \$535,556,493. The report shows the assessed valuation put on franchises under the special law for 1900 was as follows: Manhattan, \$166,763,669; Bronx borough, \$7,272,249; Brooklyn, \$39,250,552; Queens, \$4,036,817; Richmond, \$2,356,064; total, \$219,679,351. The assessed valuations of corporations were greatly reduced in 1900. In 1899 the corporations in Manhattan paid taxes on \$53,530,050, and on account of the passage of the franchise tax law assessments for \$10,994,400 only were levied for 1900, which is a loss of \$45,535,650.

Charter Revision.—In accordance with the law passed by the Legislature, Gov. Roosevelt appointed on April 25, as the New York City Charter Revision Commission, the following gentlemen: George L. Rives, Charles C. Beaman, Franklin Bartlett, Henry W. Taft, John D. Crimmins, Frank J. Goodnow, Edgar J. Levey, Alexander T. Mason, Charles A. Schieren, James McKean, Isaac M. Kapper, William C. De Witt, James L. Wells, George W. Davison, and George Cromwell. On organization, George L. Rives was chosen chairman of the commission, and the work was divided among five subcommittees, who prepared their reports, which were then considered by the commission as a whole. The report was submitted to the Governor on Dec. 1. It recommended that permanent power of removal be lodged in the Mayor; greater increased powers with the borough presidents, including almost complete control of local matters, and the charge of the Sewer and Highway departments, which as now constituted are to be abolished; the abolition of the Council and the doubling in size of the Board of Aldermen; a single-headed police commission; a bipartisan election board of four commissioners; abolition of the Board of Public Improvements; practical rebuilding of the school system; a single-headed charities commission; transfer of control of the emergency hospitals of Manhattan and the Bronx to a board of unpaid trustees; and radical changes in other departments. On Jan. 21, 1901, the report of the commission was sent to the Legislature

with a message from Gov. Odell, in which he said: "The report gives evidence of careful study, and the recommendations are in the main calculated to bring about an improvement in the administration of the affairs of the greater municipality."

Judiciary.—The vacancy in the Supreme Court caused by the death of Frederick Smyth was filled on Sept. 1 by the appointment of James A. Blanchard, and that caused by the death of Henry R. Beekman was filled on Dec. 22 by the appointment of J. Proctor Clarke. District-Attorney Gardiner continued to be the subject of much criticism during the year. The City Club submitted to the Governor 80 charges with 2,000 specifications. These were referred to Ansley Wilcox, who was appointed to report on the charges and take necessary testimony. His report, after passing through the hands of Attorney-General Davies, was considered by the Governor, and the charges were dismissed on the ground that they failed "to show any specific act of malfeasance or malfeasance grave enough to warrant the extreme step of removing from office an elective officer." Subsequent to the election, on Nov. 6, charges were again preferred against Mr. Gardiner by Deputy Attorney-General H. H. Hammond, and on Dec. 22 he was removed from office. In announcing the removal, Gov. Roosevelt said: "The charge vitally affecting the conduct of the District Attorney is that which relates to his attitude at and about election, toward the indictment of Chief of Police Devery, after the latter had issued a scandalously improper and seditious order to the police force under him. Where the conduct of the District Attorney of the County of New York affects elections, this conduct becomes a matter not merely of county, but of State and national concern. Fraud or violence at the polls in New York County in a national election may concern not merely the county itself, not merely the other counties of the State, but also the other States of the Union. It is a mere truism to assert that honest elections, free from both fraud and violence, stand at the very basis of our form of republican self-government. When the chief of police of the city of New York issued a public order to his subordinates in which he incited them to criminal violation of the law—an order which was certain to cow and terrorize some men and to encourage the entire disorderly and lawless element—the situation became so grave as to call for the interference of the chief executive of the State. Accordingly, the chief executive notified the Mayor, the sheriff, and the District Attorney that in view of the issuance of this order they would be held to a strict accountability for their acts in preserving or failing to preserve the public peace. Alone, among the other city officials charged with the solemn duty of enforcing the laws, the District Attorney, on whom rested the heaviest responsibility of the enforcement of the law, gave by public utterance aid and comfort to the chief of police." Eugene A. Philbin, a Democrat, was at once appointed to succeed Mr. Gardiner, and he has since largely reorganized the office.

Legal.—The city Law Department is in charge of the Corporation Counsel. The incumbent during the year was John Whalen. His report for 1900 shows that the city is defendant in 3,719 actions brought to force it to pay the prevailing rate of wages, and there are now pending in all 11,145 cases. There are 1,166 actions the city has to defend on account of injuries to persons and property. There were 4,150 suits begun against the city in reference to contracts. The total number of actions and proceedings begun

against the city in 1900 numbered 5,961. During the year 2,005 actions were terminated. In the condemnation proceedings to acquire title to lands in Westchester and Putnam Counties \$6,394,994 was demanded for lands taken, and the total awards were \$2,214,900, which represents a saving of \$4,180,093. There are now pending 3,722 suits against the city to recover under the prevailing rate of wages acts. These actions seek to recover amounts ranging from \$25 to \$20,000. The claims against the city in negligence actions amount to \$476,311, and the aggregate sum recovered in 16 of the 47 suits amounted to \$19,700, or 4 per cent. of the claims. The amount involved in the litigation carried on by the Corporation Counsel's office amounted to \$116,469,887.

Parks.—This department is under the charge of three commissioners, one having jurisdiction in Manhattan and Richmond, one in Brooklyn and Queens, and one in Bronx. During 1899 the commissioners were: George C. Clausen, Manhattan and Richmond; George V. Brower, Brooklyn and Queens; and August Moebius, Bronx. The office is in the Arsenal, Fifth Avenue and 65th Street. On March 30 the Park Commissioners decided that thereafter all statutory to be accepted must harmonize with the scenery of the parks, and they adopted a new set of rules governing the placing of statuary and memorials. The most sweeping rule provides that no statue, bust, memorial, or memorial building of any description shall be erected in any New York park where the scenery is of a predominating character. Statues can only be placed as adjuncts to buildings; bridges, or viaducts when they are required to heighten and beautify the effect of the scenery. Only statues of great artistic beauty and appropriate in size may be placed in any of the small parks or at the intersection of two or more avenues. These statues must be of great national or universal interest to be accepted. On June 1 Hamilton Fish Park was opened to the public with suitable ceremonies. This little park of 3½ acres is between Houston, Pitt, Stanton, and Sheriff Streets, and cost about \$2,000,000. It came into existence in consequence of the small parks act of April, 1895, and is intended as a breathing space and playground for those who live in the vicinity. The park was transformed from a mass of tenements. It contains a handsome structure to be used as a gymnasium and bathing house, a large playground, and two fountains.

Zoological Park.—This is under the care of the New York Zoological Society, of which Levi P. Morton is president, with William T. Hornaday as director. It is in the Bronx, and covers an area of 261 acres. The report of the Executive Committee shows that the present membership of the society numbered 945, an increase of 271 in 1900. The report also shows that the Park Improvement fund, on Jan. 1, 1901, amounted to \$214,499.88. There is still a balance of \$35,500.12, which must be subscribed by Aug. 1 in order to complete the fund of \$250,000 which the society is obliged to raise under the original agreement with the city. The total attendance of the year was 525,928, the largest daily attendance being on Decoration Day—20,134. The director announced that during the year he obtained a skin of what proved to be an entirely new species of mountain sheep, which is so strikingly differentiated as to render its title to independent specific rank beyond question. He named it *Ovis fannini* in honor of Curator Fannin of the Provincial Museum of British Columbia. Its head, neck, breast, abdomen, and inside of fore legs are snow white. The other portions of the body are a

brownish gray, giving the animal the appearance of being covered with a gray blanket.

Botanical Garden.—This is under the charge of a Board of Managers, of which D. O. Mills is president, with Nathaniel L. Britton as director. The report for 1900 shows that 160 annual members have qualified, making the total annual members 837. Seventeen life members have qualified, increasing the total to 85. The plants that have been growing for several years in the greenhouses of Columbia University have been transferred and placed in the 8 completed houses of the main conservatories. This collection contains about 1,800 specimens, and has been brought together with the expenditure of \$110. The number of individual species in this collection is 8,833. In the year 48,895 herbarium specimens were acquired by gift, exchange, and purchase. About 67,650 sheets, containing fully 112,050 specimens, were mounted and distributed in the herbarium cases. The director has accepted from Columbia University, acting for Barnard College, the herbarium formed by the late Dr. Thomas Morong. It is estimated to contain not less than 18,000 specimens. The report also shows that the botanical library now contains 2,832 volumes.

Fire.—This department is managed by a single commissioner. The incumbent during the year was John J. Scannell. The chief of the department was Edward F. Croker. The headquarters are at 157 East 67th Street. For the boroughs of Brooklyn and Queens there is a deputy commissioner. During 1900 the fire-fighting force in the boroughs of Manhattan, the Bronx, Brooklyn, and Queens consisted of 2,431 officers and men, apportioned among 135 engine companies, 40 hook-and-ladder companies, 6 fire boats, and 4 water towers. A volunteer force, consisting of 2,000 men in the borough of Queens, and an equal number in the borough of Richmond, increased the total force to 4,000 men. During the year there were 8,405 fires. In the Bureau of Combustibles there was collected in all the boroughs for licenses, permits, and penalties \$89,136 during the year. In the bureau of the fire marshal, 44 arson cases were tried, resulting in 7 convictions and 29 dismissals, with 8 cases still pending.

Police.—This department is managed by a board of four commissioners, appointed by the Mayor for a term of six years. The board during the year consisted of Bernard J. York, president; John B. Sexton, Jacob Hess, and Henry E. Abell. The chief of police is William S. Devery, and the central office is at 300 Mulberry Street. The force on Dec. 31 consisted of a chief, 4 deputy chiefs, 10 inspectors, 85 captains, 308 sergeants, 92 detective sergeants, 386 roundsmen, 6,261 patrolmen, 176 doormen, 22 surgeons, 57 matrons, a superintendent of telegraphs, 2 assistant superintendents of telegraphs, 14 telegraph operators, 72 linemen, a battery man, and a messenger. The number of arrests made in Manhattan and Bronx during the year was 93,137. Of these 20,058 were women and 73,079 men. The arrests included 8 for arson; attempted suicide, 243 men and 210 women; burglary, 1,041, including 12 women; disorderly conduct, 17,285 men and 9,142 women; intoxication, 12,585 men and 4,727 women; grand larceny, 2,142 men and 498 women; petty larceny, 3,574 men and 557 women; murder, 5 men, 1 woman; homicide, 235 men and 14 women; robbery, 386 men and 16 women; vagrancy, 3,596 men and 705 women; excise violation, 1,198 men and 19 women; violation of corporation ordinances, 4,644 men and 52 women. The detective bureau made 1,115 arrests, and recovered property valued at \$126,000.59. The bureau secured 109

convictions of criminals. The number of lost children received at headquarters was 2,036 boys and 1,121 girls. The number of foundlings picked up was 91 boys and 7 girls, of which there were 5 each colored boy and girl babies.

Health.—The collection of vital statistics is under the care of a board, consisting of three commissioners, one of whom must have been for five years a practicing physician, the health officers of the port, and the president of the Police Board. The officials for 1900 were: Michael C. Murphy, president (salary, \$7,500); Dr. William T. Jenkins, Dr. John B. Cosby, Health Officer Dr. Alvah H. Doty, and President Bernard J. York of the Police Board. The secretary of the board is Emmons Clark, and the office is on the corner of Sixth Avenue and 55th Street. The vital statistics were as follow: The number of deaths in 1900 was 70,872, against 66,343 in 1899. There were 25,836 deaths of children under five years, 16,579 under one year, 9,652 sixty-five years and over, 16,851 deaths in institutions, and 39,024 deaths in tenements. There were 81,721 births and 32,330 marriages reported. The number of deaths from pneumonia was 10,482, against 8,531 for 1899—more than from any other disease. There were 761 suicides, against 628 for 1899, and 139 homicides, against 137 for 1899. The death rates for the 5 boroughs are as follow: Manhattan, 20.99; Bronx, 21.51; Brooklyn, 20.09; Queens, 17.95; and Richmond, 20.52. The rate for the 5 boroughs together is 20.57. The statistics give the estimated population of the city for 1899 as 3,444,675, and for 1900, 3,536,517.

Education.—The board having control of this subject consists of 20 commissioners, who are appointed by the Mayor, and receive no salary. The president of the board at the beginning of the year was Joseph J. Little, who continued in office until May 19, when, having resigned owing to failing health, he was succeeded by Miles M. O'Brien. The borough superintendent is John Jasper, and the headquarters are at the corner of Park Avenue and 59th Street. The report of the borough superintendent on Sept. 10, the opening day of the schools, showed that the register of pupils was 248,719; attendance of pupils, 221,247; half-day and part-time classes, 318; children refused admission, 2,395; vacant sittings, 19,010; regular teachers, including principals, present, 5,397; regular teachers, including principals, absent, 238. The following new schools were opened on Sept. 10: No. 174, at Attorney and Rivington Streets, with 24 classrooms and accommodations for 1,080 pupils, and No. 173, at Beaumont Avenue and 173d Street, with 30 classrooms and accommodations for 1,350 pupils. In addition the following extensions and annexes were opened: School No. 98, Williams Bridge, 8 classrooms, accommodating 360 pupils; School No. 46, St. Nicholas Avenue and 146th Street, 15 classrooms, accommodating 675 pupils; School No. 5, 141st Street, near Edgecombe Avenue, 8 classrooms, accommodating 360 pupils; School No. 90, annex, in Tinton Avenue, 15 classrooms, accommodating 675 pupils; Girls' High School annex, Elm and Grand Streets, accommodating 350 pupils. Ten new schoolhouses were ready for occupancy and completed before Dec. 1. These, with the new schools and extensions opened on Sept. 10, accommodated 23,000 children. The total registration of pupils in the boroughs of Manhattan and the Bronx last year was 241,623.

The free public lecture courses given at public schools at night successfully closed their tenth season, and Dr. Henry M. Leipziger, superintendent of lectures, reported that in 1899 lectures

were given in 6 places—186 lectures to a total attendance of about 75,000. In 1899-1900 lectures were provided in 48 places; 1,850 lectures were given, and the attendance was about 538,000. The formal presentation of the new hall of the Board of Education, Park Avenue and 59th Street, to the city took place on Feb. 25.

Rapid Transit.—This is cared for by a commission consisting of Alexander E. Orr (president), Woodbury Langdon, Morris K. Jesup, George L. Rives, John H. Starin, and Charles S. Smith, together with the Mayor and Comptroller *ex-officio*. Office, 32 Nassau Street. Sealed bids for the building of a system of underground rapid transit were opened on Jan. 15, and on Feb. 25 the Board of Rapid Transit Railroad Commissioners awarded a contract to John B. McDonald for its construction, the route to extend from City Hall in Manhattan, through that borough, and into the borough of the Bronx. The board having fixed the cost of the proposed work at \$36,500,000, made requisition upon the Board of Estimate and Apportionment for that money, and on March 1, 1900, the Board of Estimate and Apportionment authorized the issue of corporate stock of New York to that amount. The construction company divided the 4 sections in the engineer's division of the road into 15 sections for convenience and expediency in calculating quantities, as follows: First, Post Office to center of Chambers Street; second, Chambers Street to Great Jones Street; third, Great Jones to 33d Street; fourth, 33d to 41st Street; fifth, 41st to 60th Street; sixth, 60th to 104th Street; seventh, portal of tunnel at 103d Street and Broadway to 110th Street and Lenox Avenue; eighth, 110th to 135th Street, Lenox Avenue; ninth, 135th Street to Brook Avenue, across the Harlem; tenth, East Side viaduct, three miles long, beginning at Brook Avenue; eleventh, 104th to 125th Street, Broadway; twelfth, 125th Street to 133d Street, being the Manhattan Valley viaduct; thirteenth, 133d to 182d Street; fourteenth, 182d Street to Hillside Avenue; fifteenth, West Side viaduct; each of which sections was let to a subcontractor. On March 24 the formal breaking of the ground for the rapid transit tunnel took place in City Hall Park.

On April 20 the commissioners authorized the construction along Elm Street, between the lower side of Worth Street and the north side of Astor Place, of galleries for the accommodation of the pipes, wires, sewers, and other subsurface structures. Subsequently this work was abandoned in consequence of a resolution passed on Nov. 27, but it was said that this was only preliminary to taking up a more comprehensive plan of building galleries along the whole line of railway. This will require legislation in Albany to amend the law governing the construction.

Meanwhile the work of the Construction Company was promptly begun in various parts of the city, and has steadily progressed.

Street Railways.—The order to remove the elevated tracks in Battery Park served on the Manhattan Railway by the Park Commissioners resulted in the presentation of the choice of two proposed routes to the railway officials by the commissioners. These the railway decided not to accept, and on June 20 served President Clausen with a preliminary injunction restraining the Park Commissioners from removing or interfering with the structure of the Manhattan Railway Company at Battery Park. The State Board of Railroad Commissioners granted on Aug. 6 the application of the Metropolitan Street Railway for permission to increase its capital stock from

\$45,000,000 to \$52,000,000. The proceeds of the sale of the new stock will be used in changing cable lines to underground electric trolley system in Columbus Avenue, Broadway, and Lexington Avenue, and in changing the horse road on 34th Street to electric storage battery system. The expenditures for construction and equipment work will be about \$3,000,000, and the company proposes to utilize the remaining \$4,000,000 for the payment of its floating debt, contracted in the purchase of stock in other street surface railroad corporations. A through train service over the Brooklyn Bridge and the Fifth Avenue line of the Brooklyn Elevated Railroad was begun on Dec. 19 by the Brooklyn Rapid Transit Company. The trains run between Park Row and Bath Beach.

Bridges.—In 1900 bonds amounting to \$4,000,000 were issued for carrying on the construction of the new East River Bridge. The construction has so far progressed that the anchorages of the bridge have been completed so far as can be done before the completion of the cables. The steel towers have been erected, and cable saddles have been placed thereon ready for cable making to begin. The spans connecting the steel towers and the anchorages are well advanced. Preparations were made to begin the erection of temporary foot bridges, which are to serve as false works for the support of the main cables during erection.

During the year corporate stock amounting to \$1,000,000 was issued for the construction of an additional bridge, known as Bridge No. 3, between the boroughs of Manhattan and Brooklyn. The plans for the proposed bridge have been approved by the War Department of the United States, and the contract for soundings and borings was awarded and the preliminary work completed.

Monuments.—The beautiful Naval Arch that was erected in honor of the home-coming of Admiral Dewey was removed in the early winter. A fund of \$200,000 had been collected for its construction in stone, but as the public seemed indifferent to its preservation the plan was abandoned. A request from the South Carolina and West Indian Exhibition asking permission to remove the arch and transfer it to Charleston was submitted to the Municipal Council.

On April 19 a bronze group of Washington and Lafayette, by Bartholdi, presented by Charles Broadway Rouss, was unveiled in West 114th Street, at the junction of Morningside and Manhattan Avenues. The presentation speech was made by Gen. Horatio C. King, and the statues were accepted on behalf of the city by Mr. Randolph Guggenheimer. Mr. Edmond Bruwaert, French consul in New York, who represented the French ambassador to the United States, made a short address.

A memorial tablet in honor of the officers, soldiers, and sailors of the War of Independence was placed by the New York State Society of the Daughters of the Revolution at the Reformed Collegiate Church, corner of Fifth Avenue and 29th Street, on April 24. The presentation address was made by Mrs. C. F. Roe, the regent of the society, and the tablet was accepted by Rev. Dr. Coe, representing the church.

The corner stone of the Soldiers' and Sailors' Monument, at Riverside Drive and 89th Street, was laid on Dec. 15. Bishop Farley opened the ceremonies with a prayer, and Col. Albert D. Shaw, commander in chief of the Grand Army of the Republic, delivered an address. Gov. Roosevelt then laid the corner stone, on which was the sim-

ple inscription: "Erected by the citizens of New York, MCM." A flag presented by the James Monroe Woman's Relief Corps was unfurled, and Wilson's Battery fired a salute of 19 guns.

Mayor Van Wyck and the Ice Trust.—On May 1 the American Ice Company notified its customers that the price of ice for the season would be 60 cents for 100 pounds, and that no small pieces would be sold. The daily newspapers at once criticised this course, and showed that great suffering would ensue among the poorer classes. This led to considerable agitation, which resulted in showing that the American Ice Company had secured extensive dock privileges, and possessed a complete monopoly of the ice market in the city. Further investigation developed the fact that among the stockholders were a number of Tammany politicians, including Mayor Van Wyck. On June 4 a formal request in the form of an affidavit for the removal from office of Mayor Van Wyck was presented to Gov. Roosevelt on behalf of W. R. Hearst, one of the stockholders of the American Ice Company. The Governor referred the charges to the Attorney-General, who investigated the matter and reported back his opinion, in consequence of which, on Nov. 23, Gov. Roosevelt gave the following decision: "I concur in the Attorney-General's opinion. My judgment is that the so-called Ice Trust is not a corporation in which the Mayor of New York should have stock, but no proof has been offered of any willful violation of law on the part of the Mayor such as would justify the drastic measure of removing him from office." Meanwhile the price of ice had been lowered to 30 cents for 100 pounds, and the agitation resulted in saving to the community an amount estimated to be not less than \$6,000,000. On May 28, 1900, the Attorney-General instituted proceedings to annul the certificate of the ice company. The corporation, through its counsel, fought the action at every stage on technicalities, not on the merits of the case. The first decision was in favor of the State, and an appeal was taken, which was decided on Nov. 20 in favor of the ice company.

Attack on the Police.—An appeal to Police-Captain Herlihy, of the Twelfth Precinct, for "the protection of the young, the innocent, and the defenseless against the leprous harpies who are hired as runners and touters for the lowest and most infamous dens of vice," by Canon Paddock, of the Pro-cathedral in Stanton Street, having been received "not only with contempt and derision, but with coarsest insult and obloquy," Bishop Potter, in accordance with instructions laid upon him by the Convention of the Episcopal Church of the Diocese of New York, on Nov. 15, addressed Mayor Van Wyck, protesting "against a condition of things in which vice is not only tolerated but shielded and encouraged by those whose sworn duty it is to repress and discourage it, and, in the name of unsullied youth and innocence, of young girls and their mothers who, though living under conditions often of privation and hard struggle for a livelihood, have in them every instinct of virtue and purity that are the ornaments of any so-called gentlewomen in the land. I know those of whom I speak; their homes and their lives, their toil, and their aspirations. Their sensibility to insult or outrage is as keen as theirs who are in your household or mine, and before God and in the face of the citizens of New York I protest, as my people have charged me to do, against the habitual insult, the persistent menace, the unalterably defiling contacts to which day by day, because of the base

complicity of the police of New York with the lowest forms of vice and crime, they are subjected. And, in the name of these little ones, these weak and defenseless ones, Christian and Hebrew alike, of many races and tongues, but of homes in which God is feared and his law revered, and virtue and decency honored and exemplified, I call upon you, sir, to save these people, who are in a very real way committed to your charge, from a living hell, defiling, deadly, damning, to which the criminal supineness of the constituted authorities, set for the defense of decency and good order, threatens to doom them." This letter was acknowledged by the Mayor, who said that he had sent copies of the bishop's letter to the Police Commissioners and to the District Attorney of New York County, "with the request that they assist and co-operate with you and with the Police Department. I wish here to assure you that I will exert every power which the law has given me to right the wrongs and do away with the conditions of which you complain, and to secure a hearty and efficient co-operation by the Police Department with all who are working to do away with public violations of law and decency." On the same day that Bishop Potter's communication was sent to Mayor Van Wyck, Richard Croker called a meeting of Tammany Hall Executive Committee, at which an Anti-Vice Committee was appointed consisting of Lewis Nixon (chairman), Michael C. Murphy, John W. Keller, George C. Clausen, and M. Warley Platzek, to examine into vice as found on the East Side, and to devise means for its eradication. Subsequently public addresses were made by Bishop Potter, calling attention to the iniquitous condition of affairs, and later Captain Herlihy was brought to trial for his behavior. At the close of the year an improved condition of morals prevailed in the objectionable districts.

Close of the Old Century.—On Dec. 18 the Municipal Assembly appropriated \$5,000 for a celebration to welcome the new century, and accordingly on the night of Dec. 31 City Hall was decorated with flags and electric lights, with the inscription over the main entrance of "1900—Welcome—1901. 20th Century." An elaborate exhibition of fireworks was given, and at 10.45 P. M. the official ceremonies were held, consisting of the following programme: Overture by Sousa's Band; address by Randolph Guggenheimer, President of the Council; song, *Der Tag des Herrn*, by the United German Singing Societies; overture by the band; song, *America*, by the People's Choral Union; overture; song, *The Star-spangled Banner*, by the People's Choral Union; overture; song, *Ring Out, Wild Bells*, by the People's Choral Union; overture; song, *Hallelujah Chorus*, by the People's Choral Union; overture; song, *Sea, Mountain, and Prairie*, by the People's Choral Union; overture; song, *Hymn of Thanks*, by the People's Choral Union; overture; song, *Aus der Heimath*, by the United German Singing Societies; and overture.

Post Office.—The charge of the mail is under the care of the National Government, and the Postmaster is Cornelius Van Cott. The Post Office building is at the junction of Broadway and Park Row. Besides the general post office, there are 32 branch offices, and of these Branch O, on the corner of Fifth Avenue and 17th Street, was opened on Oct. 29 with an increased force. According to the report of the Postmaster for the year ending June 30, 1900, the grand total of mail matter handled for the year was 684,768,464 pieces, as compared with 645,878,017 pieces for 1899, a gain of 38,890,447 pieces. The total in-

cluded 254,021,387 letters, 39,046,576 postals, and 391,700,501 pieces of other matter, an increase of 23,886,204 letters, 3,858,094 postals, and 11,146,149 pieces of other matter. In the local department there were handled 177,821,160 letters, 27,357,102 postals, and 217,471,772 pieces of other matter. There were received by mail 39,830,283 letters, 9,957,571 postals, and 103,613,684 pieces of other matter. In the foreign department there were handled 36,369,944 letters, 1,731,903 postals, and 70,615,045 pieces of other matter.

Immigration.—The reception of immigrants in New York is under national supervision. The commissioner, who is appointed by the President, is Thomas Fitchie. Ellis Island, in New York Bay, is the landing place for the immigrants. The report for the year ending June 30 shows that the total number of aliens arriving during the year was 341,712, of which 228,414 were males and 113,298 were females. By races and people the immigration was: Armenians and Syrian, 3,600; Bohemians, 2,329; Croatians and Dalmatians, 9,521; Dutch and Flemish, 1,516; English, Scotch, and Welsh, 5,917; Finnish, 6,783; French, 1,956; Germans, 23,382; Greek, 3,734; Hebrews, 44,520; Irish, 25,200; northern Italy, 16,690; southern Italy, 82,329; Lithuanians, 9,170; Magyars, 11,353; Polish, 36,835; Portuguese, 3,779; Rutenians, 2,653; Scandinavians, 22,847; Slovaks, 25,392; Spanish, 309; all others, 897. In addition to the foregoing, there were 99,700 American citizens who came within the scope of the inspection, by reason of the fact that they shipped in a manner to secure tickets at immigration rates and to save the usual expenses. Nearly one fourth of this number shipped as steerage passengers.

Customhouse.—The passage of goods out of the United States and the entry of foreign wares are under the Federal supervision. The Customhouse is on Wall Street, between William and Hanover Streets, and the collector is George R. Bidwell. In 1900 the imports of merchandise were valued at \$524,647,898. The amount of duties collected on merchandise, miscellaneous receipts not included, was \$151,376,607.38. Imports of gold and silver amounted to \$29,039,783. Domestic exports of merchandise were valued at \$525,807,605. Domestic exports of gold and silver amounted to \$99,311,005. The foreign exports of merchandise were valued at \$11,786,781. The amount of merchandise in transit trade amounted to \$42,823,383. The transit trade of gold and silver amounted to \$4,063,955. The imports of merchandise from Porto Rico from May, 1900, to Jan. 1, 1901, were valued at \$3,222,942, yielding duties of \$186,986.58.

Political.—The candidates for justices of the Supreme Court in the First Judicial District were Edward Patterson (Democrat and Republican), Philip H. Dugro (Democrat), and James A. Blanchard (Republican); and for judge of the City Court Francis B. Delehanty (Democrat) and Robert C. Morris (Republican) were nominated. These were the only local officials to be voted for, and the election resulted in the success of the Democratic candidates. Congressmen for the first 16 districts of New York were voted for, and the election resulted in the choice of the Democratic candidates, except in the First (Queens, Nassau, and Suffolk Counties), Third (Brooklyn), Fourth (Brooklyn), and Fourteenth (New York city), where the Republican candidates were successful. Twenty-two State Senators were chosen, and of these 14 were Democrats and 8 Republicans. Of the 35 members of the Assembly from New York County there were chosen 26 Democrats and 9 Republicans; from the annexed dis-

trict, 2 Republicans; from Kings County, 10 Democrats and 11 Republicans; from Queens County, 1 Democrat and 2 Republicans; and from Richmond County 1 Democrat; making a total representation of 38 Democrats and 23 Republicans from New York city. An interesting feature of the campaign was the great sound-money parade held on Nov. 3, when for seven hours "the flower of the business and professional interests of New York," to the number of 85,000, marched in a steady downpour of rain through streets slippery with mud, in acknowledgment of their belief in the gold standard.

NICARAGUA, a republic in Central America. By the Constitution as revised on July 11, 1894, the legislative power is vested in a Senate of 24 members elected for four years by the provinces, and a House of Representatives elected by universal male suffrage for the same time, 2 members of each house for each province. The Congress meets without convocation for ninety days every year. The President is elected directly by the people for four years. Gen. Santos J. Zelaya was elected President of the Republic for the term ending Jan. 30, 1902. The Cabinet appointed on Dec. 3, 1898, was composed as follows: Secretary of the Interior, Justice, Police, and Ecclesiastical Affairs, Gen. Fernando Abaunza; Secretary of War and Marine, José Dolores Estrada; Secretary of Foreign Affairs and Public Instruction, Dr. Joaquin Sansón; Secretary of Finance and Public Credit, Col. Felix Pedro Zelaya; Secretary of Public Works, Dr. Leopoldo Ramirez Mairena.

Area and Population.—The republic has an area of 49,200 square miles, with a population of 420,000, including 40,000 uncivilized Indians. Indians, negroes, and mixed races form the bulk of the population. The descendants of the Spanish settlers of pure blood are few, but recent settlers from the United States and Europe have augmented the white element. Managua, one capital, has about 20,000 inhabitants; Leon, the other, has 34,000. The system of public education is very imperfect. Although there are 1,020 elementary schools officially reported and 2 higher schools for boys and 1 for girls, only a small percentage of the children of school age receive a fair elementary education.

Finances.—The tax on commerce in 1897 yielded \$2,645,249; liquor tax, \$920,090; export duty on coffee, \$187,529; tax on slaughtering animals, \$132,742; direct tax, \$134,248; national railroad and steamboats, \$693,391; telegraphs and telephones, \$47,559; post office, \$33,726; other resources, \$223,527; total revenue, \$4,688,061. The expenditure on the departments of Government was \$2,667,012, of which \$850,013 went for internal development, \$429,303 for war, \$446,719 for finance, and \$132,804 for public instruction; besides \$899,441 for supplementary appropriations and \$176,124 for special war expenditure. The total expenditures were \$3,852,750. For 1898 the expenditures authorized by Congress were \$5,097,588, of which \$663,008 were for war, \$1,099,888 for internal development, and \$1,735,816 for military and naval purposes.

Nicaragua raised a sterling debt in 1886, issuing bonds for £285,000 at 6 per cent. In 1894 default was made in the payment of interest, and in 1894, by arrangement with the English creditors, the rate was reduced to 4 per cent., and coupons in arrears were made redeemable at half their face value. On July 1, 1899, the amount of principal outstanding was £276,500 and of coupons unpaid £9,530. There is an internal debt amounting in 1898 to \$7,500,000. The national wealth is estimated at \$33,972,690 for rural and \$8,590,429 for urban property.

Commerce and Production.—Rearing cattle and raising coffee and cacao are the chief industries of the country. Bananas have been planted extensively in recent years. Americans and Germans are the largest coffee planters. Sugar cane was formerly grown more than it is now, the plantations having been injured through political disturbances. Tobacco is raised in some districts. Plantations of rubber trees have been made with Government aid, and good profits are expected. The export of rubber from the forests has been interdicted, except from those of the Mosquito Territory. The mines, most of the ore containing both gold and silver, some of it silver and copper, are owned by American companies. There were 16,242 ounces of bar gold shipped abroad in 1898, the quantity having doubled in three years. The shipments of coffee were about 120,000 bags; of rubber, 6,907 hundredweight; of hides, 8,211 hundredweight; of cattle, 10,003 head; of silver dollars, 271,591. The trade in 1898 was divided among different countries, as follows, values being given in pounds sterling from British consular reports:

COUNTRIES.	Imports.	Exports.
Great Britain	£238,950	£195,000
United States	131,900	172,000
Germany	102,000	175,000
France	46,000	22,500
Rest of Europe	40,000	28,710
Central America	6,400	43,000
Other countries	7,990	500
Total	£578,240	£636,710

Railroads, Posts, and Telegraphs.—A railroad, 58 miles long, connects the port of Corinto with Momotombo and another runs from Managua to Granada, 33 miles. The cost of these lines was \$2,700,000. Another railroad has been built by the Government from Masaga to Jinotepe, affording transportation for coffee to Corinto. The post offices in 1896 sent out 1,376,366 pieces of mail matter and delivered 1,242,876. There are 1,245 miles of telegraph wire.

The Nicaragua Canal.—The Maritime Canal Company, a Nicaraguan corporation created for the purpose of constructing a canal across the isthmus of Nicaragua by an American company with headquarters in New York, began the work under a concession from the Government of Nicaragua in April, 1887, which provided that the canal should be completed within ten years from Oct. 9, 1889. The parent company was organized with the view of obtaining a subsidy from the United States Government or having that Government as a partner in the enterprise, or transferring to it the concession and the partly constructed canal. The United States Congress took action at various times, but none that was decisive, and successive technical commissions have examined the route and reported to the Government. The engineering questions connected with the project were not solved to the general satisfaction of Congress and the American public, and beyond these there was the political question of the rights of the United States over the canal even if the Government should decide to construct it. An inter-oceanic canal was desired not alone for the facilitation of American commerce and for intercommunication between the Atlantic and the Pacific States in time of peace, but for the passage of naval vessels between the two oceans in time of war; or at least the military security demanded that it should not by any possibility be made use of by an enemy for the transit of naval forces or troops. The Clayton-Bulwer treaty stood in the way of the military control of the canal by the

United States, as it provides that neither the United States nor Great Britain shall acquire territorial rights in Central America, and that both powers shall exercise joint control over any canal that may be built there to join the two oceans. The modification proposed in the treaty by Secretary Hay, by which the United States shall have exclusive control, but shall not be permitted to fortify the canal, and shall leave it open to the ships of all nations in peace or war, was not acceptable to the Senate. Meanwhile the Nicaraguan Government, on the expiration of the term of the concession granted to the Maritime Canal Company, took possession of the property of the company and removed cars, rails, and other property from Greytown into the interior, the Nicaraguan Congress having approved the decision of the Minister of Public Works that the concession was void owing to nonfulfillment of its conditions.

NINETEENTH CENTURY, IMPORTANT EVENTS OF THE. The century just closed is universally recognized as the most wonderful, in many respects, since the dawn of history. Before that century immense territories that are now under cultivation and contain cities and villages in communication with the whole civilized world were unexplored wilderness; the ports of China and Japan were closed to foreigners; there was not in the whole world a railroad, a steamboat, an electric telegraph, a sewing machine, a reaping machine, a telephone, a photograph, an electric light, a power printing press, spectrum analysis, utilized India rubber, or a known anæsthetic. The lives of some of the greatest men in various departments of activity were entirely within the nineteenth century—Dickens, Thackeray, and Mrs. Stowe among novelists; Tennyson and the Brownings among poets; Green and Parkman among historians; Goodyear, Howe, and Mergenthaler among inventors; Darwin and Henry among scientists; Gladstone, Bismarck, Cavour, and Lincoln among statesmen; and Gordon and Grant among soldiers. Two of the very greatest—Lincoln and Darwin—were born on the same day, Feb. 12, 1809—a year that is notable for the famous men that it brought into the world. Elaborate chapters have been written for various journals and magazines, each tracing the century's development of some one science, industry, or literature. A complete history of the century would fill a book much larger than this volume. The following notes are intended only to indicate briefly such events as were in one way or another significant, and to refresh the reader's memory as he reviews his reading or his experience.

1801.

- Jan. 1, the first asteroid (Ceres) was discovered by Piazzi.
- Jan. 1, the union of Great Britain and Ireland was effected.
- March 12, a British expedition defeated the French at Alexandria.
- March 24, Paul, Emperor of Russia, was assassinated.
- April 2, Nelson destroyed the Danish fleet before Copenhagen.
- May 16, William Henry Seward was born.
- July 5, David G. Farragut was born.
- Aug. 8, the war between the United States and the pirates of Tripoli was begun.
- Sept. 10, the compound blowpipe was invented by Prof. Robert Hare, of Philadelphia.
- Oct. 19, Philadelphia was first supplied with aqueduct water.
- Nov. 2, the independence of Hayti was proclaimed by Toussaint l'Ouverture.

1802.

Jan. 8, Bonaparte was made President of the Italian Republic.
 Feb. 26, Victor Hugo was born.
 March 7, Sir Edwin Landseer was born.
 March 16, the United States Military Academy at West Point was founded.
 March 27, the peace of Amiens, between Great Britain, France, Spain, and the Batavian Republic, was proclaimed.
 April 27, Louis Kossuth was born.
 May 10, George Romney, artist, died.
 Aug. 2, Bonaparte was proclaimed consul for life.
 Nov. 18, sheet copper was first manufactured in Boston.
 Nov. 18, subjection of Switzerland; Piedmont, Parma, and Elba were annexed to France.

1803.

Feb. 19, Ohio was admitted as a State.
 April 30, France sold Louisiana to the United States.
 May 12, Baron Liebig was born.
 May 25, Ralph Waldo Emerson was born.
 June 16, the percussion lock for guns and the Congreve rocket were invented.
 Sept. 18, Malthus's Essay on Population was published.
 Sept. 19, Robert Emmet was executed.
 Dec. 11, Hector Berlioz was born.
 Dec. 20, the United States took possession of Louisiana.

1804.

Feb. 12, Immanuel Kant died.
 Feb. 15, New Jersey passed an act giving freedom to all persons born in the State after July 4 of that year.
 Feb. 24, the British and Foreign Bible Society was formed.
 May 18, Napoleon Bonaparte assumed the title of Emperor.
 July 4, Nathaniel Hawthorne was born.
 July 12, Alexander Hamilton died from a wound received the day previous in his duel with Burr.
 Sept. 25, the twelfth amendment to the United States Constitution was adopted.
 Nov. 23, Franklin Pierce was born.

1805.

April 2, Hans Christian Andersen was born.
 May 9, Friedrich von Schiller died.
 May 26, Napoleon was crowned King of Italy at Milan.
 May 26, Mungo Park made a second expedition to Africa and was killed at Boossa.
 June 22, Joseph Mazzini was born.
 Oct. 21, the battle of Trafalgar was fought.
 Nov. 15, Meriwether Lewis and William Clark reached the mouth of Columbia river.
 Dec. 2, Napoleon won his victory at Austerlitz.

1806.

Jan. 8, the Cape of Good Hope was captured from the Dutch by the British.
 Jan. 23, William Pitt died.
 March 6, Elizabeth Barrett Browning was born.
 April 1, Prussia took possession of Hanover.
 June 10, resolutions were carried in the British Parliament for the abolition of the slave trade.
 July 12, Holland was created a kingdom.
 Aug. 28, coal was first mined in the United States.
 Sept. 8, Lewis and Clark returned from their exploring expedition across America to the Pacific.
 Sept. 13, Charles James Fox died.
 Oct. 14, the battle of Jena was fought.

1807.

Jan. 19, Robert Edward Lee was born.
 Feb. 27, Henry Wadsworth Longfellow was born.
 May 22, the trial of Aaron Burr for conspiracy against the United States was begun.
 May 28, Louis Agassiz was born.
 June 21, occurred the conflict between the English ship Leopard and the American frigate Chesapeake.
 July 4, Giuseppe Garibaldi was born.
 Aug. 11, Fulton's steamboat, the Clermont, made its first trip going from New York to Albany.
 Sept. 5, Copenhagen was bombarded and the Danish fleet captured by the British.
 Nov. 18, gas lamps were introduced and used in the streets of London.
 Dec. 17, John Greenleaf Whittier was born.
 Dec. 21, the embargo act was passed. It forbade any vessel to sail from the United States to a foreign port.

1808.

Jan. 1, Congress by unanimous vote prohibited the importation of slaves.
 Jan. 13, Salmon Portland Chase was born.
 March 24, Maria Felicia Malibran was born.
 May 6, the steamboat Phoenix, built by John Stevens, made her first ocean trip from Hoboken to Philadelphia.
 June 3, Jefferson Davis was born.
 Aug. 17, Arthur Wellesley defeated the French at Rolica.
 Sept. 3, the Russian fleet in the Tagus surrendered to the British.
 Oct. 16, Selim III, Sultan of Turkey, was murdered.
 Nov. 6, Finland was conquered by Russia from Sweden.
 Dec. 29, Andrew Johnson was born.

1809.

Jan. 5, the two days' battle of Wagram began.
 Jan. 16, the battle of Corunna was fought; death of Sir John Moore.
 Jan. 19, Edgar Allan Poe was born.
 Feb. 12, Abraham Lincoln was born.
 Feb. 12, Charles Darwin was born.
 April 10, an insurrection of the Tyrol under Hofer began.
 May 31, Joseph Haydn died.
 Aug. 6, Alfred Tennyson was born.
 Aug. 29, Oliver Wendell Holmes was born.
 Dec. 29, William Ewart Gladstone was born.

1810.

Feb. 5, Guadeloupe was taken by Beckwith.
 April 8, the Burdett riots occurred in London.
 April 11, Sir Henry C. Rawlinson, the "Father of Assyriology," was born.
 Aug. 10, Count Cavour was born.
 Sept. 16, the confederation of Venezuela was formed.
 Sept. 27, the French were defeated by Wellington at Busaco.
 Oct. 6, the first cotton goods printed from cylinders were made in Philadelphia.

1811.

Jan. 1, the regency of the Prince of Wales was instituted in Great Britain.
 Jan. 6, Charles Sumner was born.
 Feb. 3, Horace Greeley was born.
 Feb. 3, Mohammed Ali, Turkish Viceroy in Egypt, massacred 1,600 Mamelukes in the citadel of Cairo.
 June 10, Christophe, a negro, was crowned King of Hayti as Henry I.

June 14, Harriet Beecher Stowe was born.
 July 18, William Makepeace Thackeray was born.
 Sept. 8, the Religious Tract Society of America was formed.
 Oct. 8, Venezuela was declared independent.
 Oct. 22, Franz Liszt was born.
 Nov. 7, the battle of Tippecanoe was fought, in which William Henry Harrison defeated the Indians under Tecumseh.
 Nov. 16, John Bright was born.

1812.

Jan. 7, Sigismund Thalberg was born.
 Feb. 17, Charles Dickens was born.
 April 30, Louisiana was admitted as a State.
 May 7, Robert Browning was born.
 June 18, the United States declared war against Great Britain.
 Oct. 18, the city of Moscow was burned.

1813.

March 19, David Livingstone was born.
 May 22, Richard Wagner was born.
 June 24, Henry Ward Beecher was born.
 Sept. 10, the battle of Lake Erie took place, in which the American fleet under Perry conquered the British fleet.
 Oct. 5, the battle of the Thames, in Canada, was fought.
 Oct. 16, the three days' battle of Leipsic, called "the battle of nations," began.

1814.

July 25, the battle of Lundy's Lane, Canada, was fought.
 Aug. 25, the British burned the Capitol at Washington.
 Sept. 15, the Americans defeated the British on Lake Champlain.
 Oct. 9, Giuseppe Verdi was born.
 Oct. 20, the union of Sweden and Norway was ratified.
 Dec. 24, the Treaty of Ghent was signed.

1815.

Jan. 8, the battle of New Orleans was fought.
 Feb. 18, corn law riots occurred in London.
 Feb. 28, Ceylon was annexed to the British Empire.
 April 1, Prince Bismarck was born.
 June 18, the battle of Waterloo was fought.
 June 30, the United States concluded a treaty with Algiers.

1816.

March 4, riots occurred in England; march of the Blanketeers from Manchester.
 April 10, the charter of the Bank of the United States was extended.
 April 21, Charlotte Brontë was born.
 May 16, the Burschenschaft was formed in Germany.
 July 2, Bishop Richard Watson died.
 July 4, the Erie Canal was begun by the breaking of ground at Rome, N. Y.
 July 7, Richard Brinsley Sheridan died.
 July 14, Madame de Staël died.
 Aug. 2, the first steamboat arrived at St. Louis, Mo.
 Aug. 27, Algiers was bombarded by Lord Exmouth.
 Sept. 8, Sir Humphry Davy invented the safety lamp.
 Nov. 16, Baltimore, Md., was the first American city lighted with gas.
 Dec. 2, the first savings bank was opened in Philadelphia.
 Dec. 11, Indiana was admitted as a State.

1817.

Feb. 16, the independence of Chili was established.
 April 15, Gen. Jackson invaded Florida.
 Oct. 15, Thaddeus Kosciusko died.
 Nov. 5, Princess Charlotte of England died.
 Nov. 30, Theodor Mommsen was born.
 Dec. 10, Mississippi was admitted as a State.
 Dec. 20, William Hone was tried and acquitted, a triumph for the right of free speech.

1818.

June 17, Charles François Gounod was born.
 July 16, representative government was established in several German states.
 Aug. 13, Adams and Dodge invented a sewing machine.
 Sept. 20, patent leather was first manufactured in America by Seth Boyden.
 Nov. 9, Ivan Turgenieff was born.
 Nov. 28, the Academy of Natural Sciences was founded at Philadelphia.
 Dec. 3, Illinois was admitted as a State.

1819.

Feb. 8, John Ruskin was born.
 Feb. 22, James Russell Lowell was born.
 April 2, The American Farmer, the first agricultural newspaper in the United States, was published in Baltimore.
 May 24, Victoria was born.
 June 16, the first transatlantic voyage by steam was completed by the steamship Savannah, commanded by Moses Rogers.
 Aug. 26, Prince Albert was born.
 Nov. 22, George Eliot (Marian Evans) was born.
 Dec. 14, Alabama was admitted as a State.

1820.

Feb. 8, William Tecumseh Sherman was born.
 March 2, the Missouri compromise bill was passed.
 March 15, Maine was admitted as a State.
 May 24, Henry I (Christophe) of Hayti committed suicide, and the whole island became a republic under Boyer.
 June 10, the first steamship line between New York and New Orleans was established.
 July 12, the first steamboat on Lake Michigan arrived at Green Bay.
 Aug. 21, John Tyndall was born.
 Oct. 6, Jenny Lind was born.
 Oct. 24, Spain ceded Florida to the United States.

1821.

Feb. 23, John Keats died.
 May 5, Napoleon Bonaparte died.
 Aug. 10, Missouri was admitted as a State.
 Aug. 24, the treaty acknowledging the independence of Mexico was signed.
 Aug. 31, Hermann von Helmholtz was born.

1822.

Jan. 1, the independence of Brazil was declared.
 March 22, Rosa Bonheur was born.
 April 27, Ulysses S. Grant was born.
 May 16, Sir David Brewster explained the first elements of spectrum analysis.
 June 14, Bishop invented the wind regulator for the organ.
 July 8, Percy Bysshe Shelley died.
 Aug. 25, Dixon Denham, an Englishman, crossed the Sahara Desert to Lake Tchad.
 Aug. 25, Sir William Herschel died.
 Sept. 18, Faraday described his discovery of electro-magnetic rotation.
 Oct. 4, Rutherford B. Hayes was born.
 Dec. 27, Louis Pasteur was born.

1823.

- Feb. 10, the Royal Asiatic Society was founded.
 March 31, the first railway act in the United States was passed. It incorporated a company for the construction of a railroad from Philadelphia to Columbia, Pa.
 Aug. 18, the first steam printing press was set up in New York; its first work was an abridgment of Murray's Grammar.
 Sept. 16, Francis Parkman was born.
 Dec. 2, the Monroe doctrine was declared.

1824.

- Jan. 27, the State of Virginia granted a charter for the Ohio and Chesapeake Canal.
 March 13, a convention for the suppression of the slave trade was signed between the United States and Great Britain.
 March 20, the Franklin Institute, Philadelphia, for the promotion of manufactures and the mechanic and useful arts, was incorporated.
 April 5, the boundary line between the United States and the possessions of Russia on the Pacific coast was established by treaty.
 April 19, Lord Byron died.
 July 28, Alexandre Dumas was born.
 Aug. 15, Gen. Lafayette landed on Staten Island for a visit to the United States.

1825.

- May 4, Thomas Henry Huxley was born.
 June 17, Gen. Lafayette laid the corner stone of Bunker Hill Monument, and Daniel Webster delivered an oration. Its completion was celebrated on the same day eighteen years later, when Webster again spoke.
 Sept. 27, the first railway line was opened for public traffic in England.
 Oct. 26, the Erie Canal was formally opened.
 Nov. 29, Italian opera was first given in the United States, at New York.

1826.

- March 3, the people of Boston organized the New England Society for the Promotion of Manufactures and the Mechanic Arts.
 May 10, the American Home Missionary Society was organized in New York city.
 June 5, Baron von Weber died.
 July 4, John Adams and Thomas Jefferson died, at nearly the same hour.
 Oct. 17, the first United States railroad having metallic tracks was opened at Quincy, Mass.
 Dec. 9, John Flaxman died.

1827.

- March 26, Ludwig van Beethoven died.
 April 21, the Hicksite sect of Quakers was founded.
 May 5, the Society for the Diffusion of Christian Knowledge was founded.
 May 11, the first gravity railroad was completed at Mauch Chunk, Pa.
 June 16, the independence of Greece was established.
 Sept. 16, the manufacture of fire brick was begun at Baltimore, Md.
 Nov. 15, the first lithographic establishment was completed in Boston.

1828.

- Jan. 1, political disabilities were removed from nonconformists in England.
 Feb. 28, Varna was captured by the Russians.
 April 21, Webster's Dictionary was published.
 May 16, the construction of the Baltimore and Ohio Railroad was begun.

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- Aug. 19, the first American power loom for weaving check and plaid goods was patented by Rev. E. Burt, of Connecticut.
 Oct. 28, paper was first made from straw and hay.
 Nov. 19, Franz Schubert died.
 Nov. 23, University College, London, was opened.

1829.

- Feb. 10, Pope Leo XII died.
 Feb. 27, the Peruvian army was defeated by the Colombian in a decisive battle at Tarqui.
 March 19, a treaty between the United States and Brazil was ratified.
 March 21, by an earthquake in Spain, 4,000 houses and 20 churches were destroyed.
 May 2, the American Institute of New York State was incorporated.
 May 8, Louis Moreau Gottschalk was born.
 May 29, Sir Humphry Davy died.
 June 11, the Russians defeated the Turks in a great battle at Kulawtocha.
 June 30, the Russians captured Silistria after a siege.
 Aug. 20, the Russians captured Adrianople.
 Sept. 12, an invading Spanish army surrendered to the Mexicans at Tampico.

1830.

- Jan. 31, James G. Blaine was born.
 April 6, the Church of Latter-day Saints (Mormons) was organized at Manchester, N. Y.
 Aug. 2, Charles X of France abdicated the throne because of the revolution.
 Oct. 4, the independence of Belgium was declared.
 Oct. 5, Chester Alan Arthur was born.
 Dec. 17, Simon Bolivar died.

1831.

- March 6, Philip Henry Sheridan was born.
 March 31, the Poles defeated the Russians at Praga.
 May 26, the Russians defeated the Poles at Ostrolenka.
 June 1, Sir James Clark Ross discovered the north magnetic pole.
 June 8, Mrs. Sarah Siddons died.
 June 12, North Carolina's Statehouse, containing Canova's statue of Washington was burned.
 July 4, James Monroe died.
 July 17, Graham island appeared in the Mediterranean. It disappeared in October.
 Aug. 21, Nat Turner's insurrection occurred in Virginia. He was executed, Nov. 11.
 Sept. 7, the Russians captured Warsaw.
 Oct. 9, the President of Greece, Capo d'Istria, was assassinated.
 Oct. 26, cholera first appeared in England.
 Oct. 29-31, great riots occurred in Bristol, England.
 Nov. 19, James A. Garfield was born.
 Dec. 28, a great slave insurrection occurred in Jamaica.

1832.

- March 4, Jean François Champollion died.
 March 22, Johann Wolfgang von Goethe died.
 March 29, the Emperor of Russia proclaimed the annexation of Poland.
 May 15, Baron Cuvier died.
 June 8, cholera appeared at Quebec, the first in America.
 July 10, President Jackson vetoed the bill to extend the charter of the United States Bank.
 Aug. 1, the defeat of the Indians under Black Hawk by a force under Gen. Henry Atkinson, at Bad Axe, on the Wisconsin, took place.
 Sept. 21, Sir Walter Scott died.
 Oct. 8, Otto was proclaimed King of Greece.
 Nov. 21, South Carolina passed the nullification ordinance.

Nov. 28, the Turks were defeated by the Egyptians at Konieh.

Dec. 10, President Jackson issued a proclamation concerning the South Carolina nullification ordinance.

Dec. 24, Antwerp was surrendered to the French.

1833.

March 31, the Treasury Department, Washington, was burned.

July 24, Dom Pedro's troops captured Lisbon.

Aug. 20, Benjamin Harrison was born.

Aug. 29, 30, in Constantinople, 12,000 buildings were burned.

Aug. 31, a daily mail (Sundays excepted) was established between England and France.

Oct. 1, Secretary Taney, by order of President Jackson, removed the Government deposits from the United States Bank.

1834.

Jan. 20-22, a great earthquake occurred in Colombia, South America, and two cities were destroyed.

May 20, Gen. Lafayette died.

July 15, the Inquisition was finally abolished in Spain.

July 23, Samuel Taylor Coleridge died.

Aug. 1, all the slaves in the British dominions were emancipated.

Aug. 30, the Spanish Chamber of Peers voted to exclude Don Carlos and his heirs perpetually from the throne.

Oct. 16, the British Parliament houses were destroyed by fire.

Nov. 15, the Boston and Worcester Railroad was opened.

Dec. 1, the Baltimore and Ohio Railroad was opened from Baltimore to Harper's Ferry.

Dec. 27, Charles Lamb died.

1835.

Jan. 20, the city of Mocha, Arabia, was captured by the Egyptians.

Jan. 30, an attempt was made to assassinate President Jackson.

Feb. 20, an earthquake in Chili destroyed the city of Concepcion and other towns. In this month, also, there were destructive earthquakes and volcanic eruptions in Central America, and Vesuvius was in eruption.

June 2, the Boston and Providence Railroad was opened.

June 21, Gen. Santa Anna entered the city of Mexico in triumph, after his victory at Zacatecas.

Aug. 25, the Baltimore and Washington Railroad was opened.

Dec. 7, the first railway in Germany, Nuremberg to Fürth, was opened.

Dec. 16, a great fire in New York city destroyed \$18,000,000 worth of property.

In this year great abolition meetings, and equally great anti-abolition meetings, were held in various cities of the United States, North and South.

1836.

Feb. 7, the civil war in Peru was ended by a seven-day battle near Arequipa, in which Salaverry was defeated by Santa Cruz.

March 6, the Mexicans under Santa Anna, after heavy loss, captured the Alamo, in Texas, and massacred the few survivors of the garrison.

April 21, the Texans, under Gen. Houston, gained a great victory at San Jacinto over the Mexican army of Santa Anna.

June 15, Arkansas was admitted as a State.

June 28, James Madison died.

July 30, James G. Birney's printing office in Cincinnati was destroyed by a proslavery mob.

Aug. 1, the Utica and Schenectady Railroad was opened.

Sept. 23, Maria Felicia Malibran died.

Dec. 15, the United States Patent Office was burned.

Dec. 15, the first recurrence of influenza, or *grippe*, in this century is recorded.

In this month the plague was raging in Constantinople.

1837.

Jan. 26, Michigan was admitted as a State.

Feb. 1, Congress received a memorial, signed by 56 British authors, asking for copyright protection in the United States.

March 18, Grover Cleveland was born.

In March and April there were extensive bankruptcies in the United States.

May 10, all the New York banks suspended specie payments. Those in other cities suspended a few days later.

June 16, a new Spanish Constitution was signed and proclaimed at Madrid.

June 20, William IV of England died, and Victoria was proclaimed Queen.

July 12, Obed Hussey's reaping machine was publicly exhibited and pronounced satisfactory.

Aug. 11, Marie François Sadi-Carnot was born.

Oct. 26, the tunnel of the Harlem Railroad, in New York, was opened with a celebration.

Nov. 7, a proslavery mob killed Elijah P. Lovejoy and destroyed his printing office, at Alton, Ill.

Nov. 8, Mary Lyon founded Mt. Holyoke Seminary.

Dec. 6, Mackenzie's force of Canadian insurgents was defeated near Toronto.

Dec. 29, the palace in St. Petersburg was burned.

Dec. 29, the steamer Caroline, in the Niagara, was seized by Canadians.

1838.

March 1, a detachment of the Canadian insurgents surrendered to Gen. Wool, of the United States army, at Alburg Springs, Vt.

April 17, a bill prohibiting the sale of spirituous liquors at retail, except for medicinal purposes, became a law in Massachusetts. This preceded by a dozen years Neal Dow's famous Maine law.

April 23, the first regular steam packet between England and the United States—the Great Western, 1,340 tons—arrived at New York, fourteen and a half days from Bristol.

May 17, a mob in Philadelphia burned Pennsylvania Hall because an antislavery meeting had been held there the preceding evening.

Aug. 8, a Chilean force, after a battle, captured Callao and Lima, Peru.

Aug. 18, the Wilkes exploring expedition sailed from Norfolk, Va.

Sept. 1, \$500,000 was paid into the United States Treasury, under the will of James Smithson, to found the Smithsonian Institution.

Nov. 13, the Canadian insurgents were defeated in an action near Prescott.

1839.

Jan. 20, the Peruvian and Bolivian army was disastrously defeated by the Chilians at Yungay.

Jan. 31 W. H. Fox Talbot announced his discovery of "photogenic drawing," which was the beginning of photography. This was six months before Daguerre's invention.

February, bands of armed men were disputing as to the boundary line between Maine and New Brunswick.

March 4, the first express business in the United States was begun by William F. Harnden, between New York and Boston.

April 1, there were great Chartist riots in England.

April 13, the Catholic emancipation bill for Ireland was passed, and received the royal assent.

Aug. 5, the British captured Cabul and ended the Afghan War.

Oct. 10, the United States Bank suspended.

Oct. 16, in a letter bearing this date, Thomas Simpson announced that his expedition had established the fact of a northwest passage by tracing the coast from Point Barrow to Boothia Gulf.

Dec. 3, Pope Gregory-XVI issued a bull abolishing the slave trade.

1840.

Jan. 1, penny postage in England was established, and the number of letters dispatched that day from London was 112,000.

Jan. 19, the Wilkes expedition discovered the antarctic continent.

Feb. 10, Prince Albert and Queen Victoria were married.

May 27, Nicolo Paganini died.

July 23, Upper and Lower Canada were united under one government.

1841.

April 4, President William Henry Harrison died at the White House, the first President to die in office.

July 18, the United States sloop of war Peacock was lost on the north bar of Columbia river.

July 29, Smyrna was almost destroyed by fire; 3,500 houses were burned, 35,000 persons made homeless.

Aug. 27, the Chinese fortress of Amoy was captured by the British in the opium war.

Oct. 6, a revolution took place in Mexico. Gen. Antonio Santa Anna, with an army of 10,000 men, entered the capital and displaced President Bustamante.

Oct. 7, a revolutionary movement was made in Spain in favor of Queen Christina and absolute government.

Nov. 15, a disastrous fire took place at St. Johns, New Brunswick; 75 buildings, principally warehouses, and 40 vessels were destroyed.

Nov. 25, Sir Francis Chantrey died.

Dec. 20, a treaty was signed by Great Britain, France, Austria, Prussia, and Russia for the suppression of the African slave trade.

1842.

Jan. 5, an insurrection took place against British power in Afghanistan.

Jan. 18, a riot occurred at Cincinnati, Ohio, caused by the failure of certain banks.

Feb. 20, Texas was invaded by an army from Mexico 8,000 strong.

March 24, Albert Bertel Thorwaldsen died.

May 3, the Dorr war, in Rhode Island, began.

May 7, an earthquake took place in Santo Domingo, by which the town of Cape Haytien was destroyed and 7,000 persons lost their lives.

June 25, Bunker Hill monument was completed.

June 28, the steamer Columbia arrived in Liverpool from Boston; time, eleven days six hours, being the shortest passage that had been made across the Atlantic at that time.

Aug. 9, the Ashburton treaty, fixing the boundary between Maine and Canada, was signed at Washington.

Aug. 20, the treaty between the United States and England determining the boundary of Maine was ratified.

1843.

Jan. 9, a destructive fire took place at Port au Prince, Santo Domingo; 600 buildings were burned; estimated loss, \$4,000,000.

Jan. 29, William McKinley was born.

Feb. 17, a battle was fought in British India between 2,800 British troops, commanded by Sir Charles Napier, and 22,000 Belooches. The latter were defeated with a loss of 5,000 men.

Feb. 25, Lord George Paulet hoisted the British flag at the Sandwich Islands.

June 17, the completion of the Bunker Hill monument was celebrated.

July 2, Samuel Hahnemann died.

July 26, the insurgent party in Spain entered Madrid in triumph and appointed the Duke of Baylen provisional guardian of the Queen.

1844.

Jan. 14, a convention was ratified between the authorities of Yucatan and Mexico, by which peace was declared and the former country annexed to the latter.

Feb. 2, Daniel O'Connell and other persons were found guilty of conspiracy.

March 31, the Fox family, Hydeville, N. Y., professed to hear spirit rappings.

April 12, a treaty of annexation between the United States and Texas was signed by President Tyler.

May 24, the first public exhibition was given of Morse's electric telegraph, between Baltimore and Washington.

May 30, Daniel O'Connell was sentenced in Dublin to twelve months' imprisonment, a fine of £2,000, and to give security in the sum of £5,000 for good behavior for seven years.

July 25, Mehemet Ali abdicated the sovereign power of Egypt in favor of his son Ibrahim.

Sept. 4, the English House of Lords reversed the judgment of the court and set O'Connell and his associates at liberty.

Oct. 24, this was the day set by William Miller for the second coming of Christ.

1845.

Jan. 25, a joint resolution for the annexation of Texas to the United States passed the House of Representatives by a vote of 120 to 98.

March 3, Florida was admitted as a State.

March 30, a religious war broke out in Switzerland between Catholic and Protestant parties.

June 8, Andrew Jackson died.

July 4, Texas was annexed to the United States.

July 19, a fire in New York city destroyed 302 stores and dwelling houses—property to the amount of \$6,000,000.

Aug. 27, Gov. Silas Wright, of New York, issued a proclamation declaring the county of Delaware to be in a state of insurrection.

Nov. 9, Austen Henry Layard began the excavations that brought to light the ruins of Nineveh.

Dec. 29, Texas was admitted as a State.

1846.

May 8, the first engagement of the war between the United States and Mexico took place at Palo Alto.

June 15, a treaty accepting the forty-ninth parallel as the Oregon boundary was signed.

Sept. 10, the first patent for a practical sewing machine with eye-pointed needle was issued to Elias Howe, of Massachusetts.

Sept. 23, the planet Neptune was discovered.

Sept. 30, the use of anesthetics was introduced by Dr. William T. G. Morton. (Other claimants for this honor were Dr. Charles T. Jackson and

Dr. Horace Wells. This note does not profess to decide the controversy.)
Dec. 28, Iowa was admitted as a State.

1847.

Jan. 14, a revolution broke out against American authority in New Mexico.
Feb. 8, the long-deferred Constitution was given by Frederick William of Prussia to his subjects.
Feb. 22, the battle of Buena Vista was fought.
March 29, the city of Vera Cruz surrendered to the forces under Gen. Scott.
May 1, the corner stone of the Smithsonian Institution, Washington, was laid.
May 15, Daniel O'Connell died.
May 31, Dr. Thomas Chalmers, theologian, died.
July 18, the United States frigate *Macedonian* sailed from New York, freighted with bread-stuffs for the starving poor of Ireland.
Sept. 14, the United States army under Gen. Scott entered the city of Mexico.
Nov. 4, Felix Mendelssohn-Bartholdy died.

1848.

Jan. 18, James W. Marshall discovered gold in California.
Feb. 23, John Quincy Adams died.
Feb. 23, Louis Philippe was dethroned by a revolution in France.
April 8, Gaetano Donizetti died.
May 25, the Mexican Senate ratified the treaty by which California and New Mexico were ceded to the United States, while the United States agreed to pay Mexico \$54,500,000.
May 29, Wisconsin was admitted as a State.
June 27, the new Federal Constitution of Switzerland was adopted by popular vote.

1849.

March 3, the Interior Department of the United States Government was established.
June 15, James K. Polk died.
Aug. 17, a fire at Albany burned 600 buildings, besides steamboats; loss, \$3,000,000.
Oct. 7, Edgar Allan Poe died.
Oct. 17, Frédéric François Chopin died.
Dec. 31, the Hudson River Railroad was opened as far as Poughkeepsie.
The Apache, Navajo, and Ute War occurred this year.

1850.

March 31, John Caldwell Calhoun died.
April 23, William Wordsworth died.
July 9, President Taylor died in the executive mansion.
Aug. 20, Honoré de Balzac died.
Sept. 6, the bill establishing the Texas boundary and providing a Territorial government for New Mexico passed the House of Representatives.
Sept. 7, the bill organizing Utah as a Territory passed the House of Representatives.
Sept. 9, California was admitted as a State.
Sept. 12, the fugitive slave law was passed by Congress.
Sept. 16, the bill to prohibit the slave trade in the District of Columbia passed the Senate.
Dec. 29, the English forces, in an engagement with Kaffirs, South Africa, were defeated.

1851.

Jan. 27, John James Audubon, the naturalist, died.
March 4, James Richardson, African traveler, died.
May 1, the first world's fair was opened in Hyde Park, London.
May 15, Herrera, ex-President of Mexico, died.

June 2, the original Maine law (prohibiting the sale of liquor) was passed.
June 3, the oath of abjuration (Jew) bill passed the House of Commons.
July 10, M. Daguerre, discoverer of photography, died.
Sept. 14, James Fenimore Cooper died.
Dec. 2, Louis Napoleon was made Emperor of the French, by a *coup d'état*.
Dec. 19, Joseph Mallord William Turner died.

1852.

Jan. 8, Gen. Urquiza completed the passage of the Parana with 28,000 men, 50,000 horses, and 50 pieces of artillery, and prepared to approach Buenos Ayres.
Feb. 1, the Ohio Statehouse was destroyed by fire.
March 20, Uncle Tom's Cabin was published.
June 29, Henry Clay died.
Sept. 14, the Duke of Wellington died.
Oct. 24, Daniel Webster died.
Nov. 26, at Stafford House, London, some English ladies, headed by the Duchess of Sutherland, adopted an address to the women of America on the subject of negro slavery. It subsequently received 576,000 signatures.
Dec. 15, war between the Turks and the Montenegrians broke out.
Dec. 20, the province of Pegu, Burmah, was annexed to the British dominions.

1853.

Jan. 11, Russia, Austria, and Prussia acknowledged Napoleon III as Emperor of France.
Feb. 6, an insurrection, planned by Mazzini, broke out in Milan.
July 4, the first railroad in Norway was opened.
July 14, a world's fair was opened in New York city.
Sept. 8, the First Chamber in Holland adopted the law respecting religious liberty by a majority of 22 to 16.
Nov. 6, the first Chinese Presbyterian Church was organized in San Francisco.

1854.

Jan. 2, the authorities of Glasgow opened the Victoria Bridge.
Jan. 9, the Astor Library was opened in New York.
April 30, the first railroad was opened in Brazil.
May 25, the Kansas-Nebraska bill was passed, which included the repeal of the Missouri compromise.
Sept. 20, the battle of the Alma took place, the first action of the Crimean War.
Sept. 28, the United States sloop of war *Albany*, Commander James T. Gerry, sailed from Aspinwall, and was lost with all hands.
Oct. 25, the battle of Balaklava was fought.
Nov. 5, the battle of Inkerman was fought.
Dec. 2, a new treaty was concluded between Austria and the Western powers.

1855.

Jan. 28, a railroad was opened across the Isthmus from Aspinwall to Panama.
March 14, the new suspension bridge at Niagara Falls was crossed for the first time by a train of cars.
March 31, Charlotte Brontë died.
May 21, the ship canal around the Sault Ste. Marie was completed.
Sept. 17, the corner stone of the Public Library, Boston, was laid.
Oct. 17, Henry Bessemer received the first patent for his process of producing steel.

Nov. 1, William Makepeace Thackeray visited the United States, and delivered his first lecture in New York city.

Nov. 8, an international commission for constructing a canal through the Isthmus of Suez left Marseilles.

1856.

Feb. 17, Heinrich Heine died.

March 26, the first street railroad in New England was opened, between Boston and Cambridge.

March 30, the treaty of peace between the allies and Russia was signed.

April 11, the great bridge at Rock Island was completed, and locomotives passed from the Illinois to the Iowa side.

May 22, Charles Sumner, in the United States Senate, was beaten with a heavy cane by Preston S. Brooks.

July 29, Robert Schumann died.

Aug. 28, the Dudley Observatory was inaugurated in Albany.

Nov. 10, the New York and Newfoundland telegraph line was opened.

1857.

Jan. 6, the Vermont State Capitol, at Montpelier, was destroyed by fire.

March 6, the Dred Scott decision was rendered.

May 10, the Memphis and Charleston Railroad was opened.

May 30, the Sepoy mutiny in India began.

July 16, Pierre Jean de Béranger died.

Sept. 14, the English, after a conflict of six days, gained possession of the city of Delhi.

Oct. 19, Nicaragua declared war against Costa Rica.

Dec. 4, Gen. Comonfort was declared constitutional President of Mexico.

1858.

Jan. 31, the Great Eastern was launched on the Thames.

May 11, Minnesota was admitted as a State.

June 15, the natives at Jeddah massacred all the Christians in that city. Forty-five were slain.

July 25, 26, the English man-of-war Cyclops bombarded Jeddah.

July 30, John Hanning Speke discovered the great lake Victoria Nyanza, which is the source of the Nile.

Aug. 16, messages were exchanged between Queen Victoria and President Buchanan through the first Atlantic cable.

Sept. 1, the East India Company ceased to exist, and its vast possessions passed into the hands of the English Government.

Oct. 5, the Crystal Palace, in New York, was destroyed by fire.

1859.

Jan. 21, Henry Hallam died.

Jan. 28, William H. Prescott died.

Feb. 14, Oregon was admitted as a State.

May 6, Alexander von Humboldt died.

June 14, the battle of Magenta, Italy, was fought.

June 24, the battle of Solferino, Italy, was fought.

June 30, Émile Gravellet Blondin walked across Niagara on a tight rope.

Aug. 26, oil was first struck in boring at Titusville, Pa.

Oct. 16, John Brown's raid, at Harper's Ferry, Va., took place.

Nov. 28, Washington Irving died.

Dec. 8, Thomas De Quincey died.

Dec. 28, Lord Macaulay died.

1860.

March 24, a treaty between Sardinia and France, for the annexation of Savoy and Nice to France, was signed at Turin.

March 27, a Japanese embassy, sent to ratify Perry's treaty, arrived at San Francisco.

July 1, Charles Goodyear, the inventor of vulcanized rubber, died.

Sept. 21, the Prince of Wales visited the United States.

Nov. 6, Abraham Lincoln was elected President of the United States.

Dec. 20, South Carolina seceded from the Union.

1861.

Jan. 4, the first national fast day in the United States was observed.

Jan. 9, the first shot of the civil war was fired at the United States steamer Star of the West, off Charleston, S. C.

Jan. 9, Mississippi seceded from the Union.

Jan. 10, Florida seceded from the Union.

Jan. 11, Alabama seceded from the Union.

Jan. 19, Georgia seceded from the Union.

Jan. 26, Louisiana seceded from the Union.

Jan. 29, Kansas was admitted as a State.

Feb. 1, Texas seceded from the Union.

Feb. 9, the Confederate Provisional Government was organized at Montgomery, Ala.

March 3, the emancipation of the serfs in Russia was proclaimed, to be effected two years later.

March 4, Abraham Lincoln was inaugurated President of the United States.

March 17, Victor Emanuel II became King of unified Italy.

April 12, the bombardment and capture of Fort Sumter took place.

April 17, the Virginia Convention passed an ordinance of secession, to be submitted to the people in May.

April 19, a conflict in Baltimore between Massachusetts soldiers and a riotous mob caused the first bloodshed of the civil war.

June 10, the first battle of the civil war took place at Big Bethel, Va.

June 30, Elizabeth Barrett Browning died.

July 21, the battle of Bull Run was fought.

Nov. 8, Capt. Charles Wilkes, commanding the frigate San Jacinto, took the Confederate commissioners Mason and Slidell from the British mail steamer Trent in the Bahama Channel.

Dec. 14, Albert, Prince Consort, died.

Dec. 30, the New York city banks suspended specie payment.

1862.

Jan. 13, Edwin M. Stanton became Secretary of War in President Lincoln's Cabinet.

Jan. 18, John Tyler died.

Jan. 19, the battle of Mill Spring, Ky., was fought.

Feb. 6, Fort Henry, on Tennessee river, was captured.

Feb. 15, Fort Donelson, on Cumberland river, was surrendered to Gen. Grant, with its garrison of 14,000 Confederate soldiers.

March 8, the battle of Pea Ridge, Ark., was fought.

March 9, the battle of the Monitor and the Merrimac was fought in Hampton Roads.

March 14, the battle of Newbern, N. C., was fought.

April 6, 7, the battle of Pittsburg Landing, or Shiloh, Tenn., took place.

April 11, a bill was passed abolishing slavery in the District of Columbia.

April 23, New Orleans was captured by Farragut's fleet.

May 5, the battle of Williamsburg, Va., took place.

May 31, the battle of Fair Oaks, Va., took place.

June 26, the six days' battle on the Virginia peninsula began.
 July 24, Martin Van Buren died.
 Sept. 14, the battle of South Mountain, Md., was fought.
 Sept. 17, the battle of Antietam, Md., was fought.
 Sept. 22, President Lincoln's preliminary proclamation of emancipation was issued.
 Oct. 3, the battle of Corinth, Miss., began.
 Oct. 8, the battle of Perryville, Ky., was fought.
 Dec. 13, the battle of Fredericksburg, Va., was fought.
 Dec. 31, the battle of Murfreesboro, Tenn., began.

1863.

Jan. 1, President Lincoln's final emancipation proclamation was issued.
 April 21, the State of West Virginia was officially proclaimed by the President.
 May 2, the battle of Chancellorsville, Va., began.
 July 1, 2, 3, the battle at Gettysburg, Pa., was fought.
 July 4, Vicksburg, Miss., was surrendered to Gen. Grant, with its garrison of more than 31,000 Confederate soldiers.
 July 13, the draft riots broke out in New York city.
 Nov. 2, the great organ in the Music Hall, Boston, was first heard by the public.
 Nov. 23, 24, 25, the battle at Chattanooga was fought.
 Dec. 24, William Makepeace Thackeray died.

1864.

Feb. 20, the battle of Olustee, Fla., was fought.
 April 18, Düppel, in Schleswig, was captured by the Prussians, and this ended the short war by which the duchies of Schleswig and Holstein were taken from Denmark.
 May 2, Giacomo Meyerbeer died.
 May 5, 6, the battle of the Wilderness was fought, in Virginia.
 May 12, the battle of Spottsylvania, Va., was fought.
 May 14, the battle of Resaca, Ga., began.
 May 18, Nathaniel Hawthorne died.
 June 3, the battle of Cold Harbor, Va., was fought.
 June 7, the Philadelphia Sanitary Fair was opened.
 June 13, the fugitive slave law was repealed by the House of Representatives.
 June 19, the Confederate cruiser Alabama was sunk off Cherbourg, France, by the United States steamer Kearsarge.
 July 9, the battle of the Monocacy was fought, for the protection of Washington.
 July 22, the battle of Atlanta, Ga., was fought.
 Aug. 5, the battle of Mobile Bay was fought.
 Sept. 2, Sherman's army captured Atlanta.
 Sept. 18, the battle of Opequan, Va., was fought.
 Oct. 11, the people of Maryland voted to abolish slavery. Chief-Justice Roger B. Taney, a native of that State, who was the author of the Dred Scott decision, died the next day.
 Oct. 19, the battle of Cedar Creek, Va., was fought.
 Oct. 27, the Confederate ram Albemarle was blown up with a torpedo by Lieut. Cushing.
 Oct. 31, Nevada was admitted as a State.
 Nov. 8, President Lincoln was re-elected.
 Nov. 15, Gen. Sherman began his march to the sea.
 Nov. 30, the battle of Franklin, Tenn., was fought.
 Dec. 15, 16, the battle of Nashville, Tenn., was fought.

1865.

Jan. 11, Missouri passed a law freeing all its slaves.

Jan. 15, Fort Fisher, N. C., was captured by United States troops commanded by Gen. Terry and a fleet commanded by Admiral Porter.
 Jan. 20, Gen. Sherman began his march through the Carolinas.
 March 19, the battle of Bentonville, N. C., was fought.
 April 1, the battle of Five Forks, Va., was fought.
 April 3, Richmond, Va., was captured by forces under Gen. Godfrey Weitzel.
 April 9, Gen. Robert E. Lee surrendered his army at Appomattox, Va., to Gen. Grant.
 April 14, President Lincoln was assassinated.
 April 26, Gen. Joseph E. Johnston surrendered his army to Gen. Sherman at Durham Station, N. C.
 Nov. 2, a national peace thanksgiving was held.
 Dec. 18, the ratification of the thirteenth amendment to the United States Constitution was officially announced.
 William Booth organized the Salvation Army.

1866.

April 6, the first post of the Grand Army of the Republic was formed at Decatur, Ill.
 April 10, Henry Bergh organized the Society for the Prevention of Cruelty to Animals.
 May 29, Gen. Winfield Scott died.
 June 2, an engagement took place at Limestone Ridge between Fenians and Canadians.
 June 13, the fourteenth amendment to the United States Constitution was proposed by Congress.
 June 25, a commercial convention between the United States and Japan was signed.
 July 3, the battle of Koeniggratz, in Bohemia, was fought.
 July 4, a great fire occurred in Portland, Me.
 July 27, permanent telegraphic communication was established between Europe and America by Atlantic cable.

1867.

Jan. 30, the Evangelical Alliance of the United States was organized in New York.
 Feb. 5, the city of Mexico was evacuated by the French.
 March 1, Nebraska was admitted as a State.
 March 29, the British North American act, which provided for federation of the Canadian colonies, received the Queen's assent.
 April 1, a world's fair was opened in Paris.
 Oct. 9, Alaska was formally transferred from Russia to the United States. United States forces took possession of the country on the 18th.

1868.

May 30, this date was established and first observed as Memorial or Decoration Day.
 June 1, James Buchanan died.
 July 28, the ratification of the fourteenth amendment to the United States Constitution was officially announced.
 Nov. 13, Gioacchino Rossini died.

1869.

March 8, Hector Berlioz died.
 May 10, the Union and Central Pacific Railroads were joined at Promontory Point, Utah, making the first transcontinental line.
 June 15, a great musical jubilee of five days, commemorating the restoration of peace, was begun in Boston.
 July 23, the American end of the Franco-American cable was landed at Duxbury, Mass.
 Oct. 8, Franklin Pierce died.
 Nov. 16, the Suez Canal was opened for commerce.
 Nov. 25, Giulia Grisi died.

1870.

- Feb. 25, Hiram R. Revels, of Mississippi, the first colored man elected to the United States Senate, took his seat.
 March 10, Ignaz Moscheles died.
 March 30, the ratification of the fifteenth amendment to the Constitution of the United States was officially announced.
 June 2, Charles Dickens died.
 July 15, war was declared between France and Germany.
 Sept. 1, the French army in Sedan surrendered.
 Sept. 4, the French republic was established.
 Oct. 12, Gen. Robert E. Lee died.
 Oct. 27, the French army besieged in Metz surrendered.

1871.

- Jan. 28, German troops entered Paris.
 Feb. 9, the United States Fish Commission was established.
 March 18, the Commune took possession of Paris.
 April 27, Sigismund Thalberg died.
 May 8, the treaty of Washington was signed, providing for settlement of the Alabama claims by a tribunal of arbitration to meet at Geneva, Switzerland.
 Sept. 28, Brazil passed a law for the progressive abolition of slavery.
 Oct. 8, a great fire in Chicago began. The total loss was \$190,000,000.

1872.

- Jan. 5, Joseph Gillott, inventor and maker of the first successful steel pens, died.
 Feb. 27, Congress passed a bill making the Yellowstone valley a national park.
 Sept. 14, the Geneva tribunal for arbitration of the Alabama claims rendered its decision in favor of the United States.
 Oct. 10, William H. Seward died.
 Nov. 6, Gen. George G. Meade died.
 Nov. 9, a great fire in Boston destroyed about \$75,000,000 worth of property.
 Nov. 29, Horace Greeley died.
 Dec. 12, Edwin Forrest died.

1873.

- April 11, Capt. Jack and other Indians massacred Gen. Canby and Dr. Thomas, commissioners.
 May 7, Salmon P. Chase died.
 Oct. 31, the international bridge across the Niagara river was completed.
 Nov. 4, 30 Americans captured with the Virginian were shot in Cuba.
 Dec. 14, Louis Agassiz died.
 A world's fair was held in Vienna.

1874.

- Feb. 13, the Royal Astronomical Society of England awarded its gold medal to Prof. Simon Newcomb, of the Washington Observatory, for his researches respecting the orbits of Neptune and Uranus.
 March 8, Millard Fillmore died.
 March 11, Charles Sumner died.
 July 4, the steel bridge over the Mississippi at St. Louis was opened.
 Aug. 4, the first assembly met at Chautauqua.
 Oct. 9, the World's Postal Union was founded.
 The Society for the Prevention of Cruelty to Children and the Woman's Christian Temperance Union were organized this year.

1875.

- Jan. 14, a bill for the resumption of specie payments, having passed both houses, was approved by the President.

- Feb. 9, the first train passed through the Hoosac Tunnel.
 April 5, the Massachusetts Legislature repealed the prohibitory liquor law.
 July 31, Andrew Johnson died.
 Sept. 1, the post office at Broadway and Park Row, New York, was occupied.
 Sept. 16, the system of fast mails was first introduced in America.
 Nov. 22, Henry Wilson, Vice-President, died in office.

1876.

- April 28, Queen Victoria issued a proclamation assuming the title Empress of India.
 May 10, the Centennial Exposition was opened in Philadelphia.
 June 6, an International Cremation Congress met in Dresden.
 June 25, the Custer massacre took place in Montana.
 June 30, the first railroad built in China was formally opened. It connected Shanghai and Woosung.
 Aug. 1, Colorado was admitted as a State.
 Nov. 1, the ship canal connecting Amsterdam with the North Sea was opened.

1877.

- March 15, Prof. A. Graham Bell gave an exhibition to a company of scientific men of his newly invented telephone. They heard a conversation between Salem and Boston.
 April 24, war was declared between Russia and Turkey.
 Aug. 11, Prof. Asaph Hall discovered the first of the satellites of Mars.
 Sept. 30, the Sioux Indians surrendered to the United States, ending a long war.
 Dec. 10, the Turkish army in Plevna surrendered to the Russians.
 Dec. 24, M. Cailletet announced to the French Academy that he had liquefied oxygen.

1878.

- Feb. 8, Pius IX died, having held the papal chair thirty-one years, longer than any of his predecessors.
 April 29, the first elevated train on the Sixth Avenue road, New York city, was run.
 June 12, William Cullen Bryant died.
 June 20, Charles B. Everest, while boring for oil at Warsaw, N. Y., discovered a stratum of salt 70 feet thick and 1,272 feet below the surface.
 Oct. 8, Thomas A. Edison announced his success in subdividing the electric current.

1879.

- Jan. 1, the United States Government resumed specie payments.
 Feb. 15, women were authorized to practice law before the Supreme Court of the United States.
 Feb. 26, the Boston Associate Charities was organized.
 May 29, the Chicago Academy of Fine Arts was incorporated.
 Dec. 12, Thomas A. Edison exhibited his incandescent carbon vacuum lamp.

1880.

- March 30, the New York Metropolitan Museum of Art was opened.
 May 8, the New York Board of Health was organized.
 May 31, the League of American Wheelmen was organized at Newport, R. I.
 June 12, the Egyptian obelisk was shipped from Alexandria to New York.

Nov. 11, the revision of the New Testament by the British and American committees was completed.
Dec. 22, George Eliot died.

1881.

Feb. 2, the Young People's Society of Christian Endeavor was organized in Portland, Me.
Feb. 5, Thomas Carlyle died.
March 13, Alexander II, Emperor of Russia, was assassinated.
June 1, the Secretary of War prohibited the use of tobacco by the cadets at West Point.
June 13, the Jeannette, of the De Long polar expedition, was crushed in the ice in 77° 15' north, 155° east.
July 2, President James A. Garfield was shot. He died Sept. 19.
Aug. 26, Prof. Amos E. Dolbear announced a new system of telephone, with an improved receiver.

1882.

Jan. 4, John William Draper, scientist, died.
Jan. 28, the cable street railway was first tested in Chicago.
March 24, Henry Wadsworth Longfellow died.
April 19, Charles Darwin died.
April 27, Ralph Waldo Emerson died.
June 2, Giuseppe Garibaldi died.
July 11, Alexandria, Egypt, was bombarded by a British fleet, plundered, and burned.
Dec. 6, a transit of Venus took place.

1883.

Jan. 16, the national civil service reform bill became a law.
Feb. 13, Richard Wagner died.
Feb. 21, importation of American pork into Germany was prohibited.
April 4, Peter Cooper died.
May 15, a treaty between the United States and Korea was ratified at Seoul.
May 24, the East river suspension bridge was opened.
Aug. 27, there was an eruption of the volcano Krakatoa, between Java and Sumatra. It caused the famous red sunsets.
Aug. 28, there was a great tidal wave in the Straits of Sunda.
Sept. 3, Ivan Turgeneff died.
Sept. 21, direct telegraphic communication was established between the United States and Brazil, via Central America.
Oct. 1, the rate of letter postage in the United States was reduced from 3 cents to 2 cents.
Nov. 5, the Egyptian army in the Soudan was annihilated by the followers of the False Prophet.
Nov. 14, the Arlberg Tunnel through the Alps was completed.

1884.

Feb. 2, Wendell Phillips died.
Feb. 11, Charles Bradlaugh, because of his atheism, was refused the seat in Parliament to which he had been elected.
Feb. 15, the first railroad train crossed the Andes from Buenos Ayres.
July 1, Franz Eduard Todleben died.
Dec. 6, the Washington monument was completed.

1885.

Jan. 1, a convention went into effect between Russia and Germany for the extradition of political criminals.
Jan. 24, attempts were made to destroy the Tower of London and the Houses of Parliament with dynamite, and the explosions caused much damage, wrecking a part of the House of Commons.
Jan. 27, Khartoum fell, Gen. Gordon was killed.

April 13, the McCormick Observatory, costing \$70,000, was dedicated.
May 22, the Revised Old Testament was published simultaneously in New York and London.
May 22, Victor Hugo died.
July 23, Ulysses S. Grant died.
Aug. 29, the first cable railroad was operated in New York.
Oct. 29, Gen. George B. McClellan died.

1886.

April 11, the first observation of Arbor Day in the United States occurred in Michigan.
May 7, the emancipation of slaves in Cuba was practically completed.
May 23, Leopold von Ranke died.
July 31, Franz Liszt died.
Aug. 4, Samuel J. Tilden died.
Nov. 18, Chester Alan Arthur died.

1887.

March 8, Henry Ward Beecher died.
June 14, the Bureau of Indian Missions (Roman Catholic) was incorporated.
Sept. 5, the first observance of Labor Day in the United States took place in Maine.
Nov. 2, Jenny Lind died.
Nov. 21, a practical phonograph, invented by Thomas A. Edison, was announced.

1888.

May 10, the United States Congress passed the international copyright bill.
Aug. 5, Philip Henry Sheridan died.
Oct. 23, President Cleveland approved the Chinese exclusion act.
Nov. 28, Edison's improved phonograph was exhibited.
Dec. 12, the American Sabbath Union was organized.
Dec. 17, a training school for nurses was opened at Bellevue Hospital, New York.

1889.

Feb. 11, the Constitution of the Empire of Japan was proclaimed.
March 8, John Ericsson died.
March 16, the Mahdists were defeated in the battle of Senoussi.
March 27, John Bright died.
Nov. 3, North and South Dakota were admitted as States.
Nov. 8, Montana was admitted as a State.
Nov. 11, Washington was admitted as a State.
Nov. 15, Dom Pedro II of Brazil was dethroned, and a republic was established.
Dec. 6, Jefferson Davis died.
Dec. 12, Robert Browning died.

1890.

Jan. 27, the stethotelephone was patented by James Louth.
March 21, the New York Court of Appeals decided that execution by electricity was constitutional.
April 20, the Psychical Research Society was formed.
July 3, Idaho was admitted as a State.
July 10, Wyoming was admitted as a State.

1891.

Jan. 7, an international monetary conference met in Washington.
Jan. 12, Canada brought suit in the United States Supreme Court for seizure of sealing vessels in Bering Sea.
Jan. 17, George Bancroft died.
Jan. 22, Hebrews were expelled from Moscow.

Feb. 14, William Tecumseh Sherman died.
 Feb. 21, the battle of Tokar, Egypt, was fought.
 April 24, Helmuth Karl von Moltke died.
 Aug. 12, James Russell Lowell died.

1892.

Jan. 31, Charles H. Spurgeon died.
 March 12, anarchists in Paris wrecked the house of a judge with dynamite.
 July 12, Cyrus W. Field died.
 Sept. 7, John Greenleaf Whittier died.
 Oct. 6, Alfred Tennyson died.
 In the spring of this year there was civil war, ending in revolution, in Venezuela.

1893.

Jan. 16, the Queen of Hawaii was dethroned, and a provisional government was established.
 Jan. 17, Rutherford B. Hayes died.
 Jan. 23, Phillips Brooks died.
 Jan. 27, James G. Blaine died.
 May 1, the World's Columbian Exposition, in Chicago, was opened.
 Aug. 6, the ship canal through the Isthmus of Corinth was opened to commerce.
 Oct. 18, Charles François Gounod died.
 Nov. 8, Francis Parkman died.
 Dec. 4, John Tyndall died.

1894.

Jan. 22, hundreds of anarchists were arrested in Italy, and peasants and workingmen were disarmed.
 Jan. 25, French troops occupied Timbuctoo.
 Jan. 27, an earthquake destroyed the town of Kuchan, Persia, and killed about 12,000 persons.
 Feb. 7, an International Sanitary Conference met in Paris.
 Feb. 11, war began between Peru and Ecuador.
 Feb. 27, Marietta Alboni died.
 March 20, Louis Kossuth died.
 May 9, an earthquake in Venezuela destroyed several villages and more than 10,000 lives.
 June 24, President Carnot, of France, was assassinated.
 July 4, a republic was proclaimed in Hawaii.
 July 27, war was declared between Japan and China.
 Aug. 27, the Wilson tariff bill became a law without President Cleveland's signature.
 Sept. 8, Hermann von Helmholtz died.
 Sept. 15, a battle was fought at Ping-Yang, in which the Chinese lost about 16,000 men. The Japanese loss was small in comparison.
 Oct. 7, Oliver Wendell Holmes died.
 Nov. 16, there was a great massacre of Armenian Christians by Turks in Kurdistan—neither the first nor the last of the kind.
 Nov. 21, there was a massacre of Chinese by Japanese troops at Port Arthur.

1895.

Jan. 17, Félix Faure was elected President of the French republic.
 Jan. 30, Liliuokalani formally abdicated the Hawaiian throne.
 Jan. 31, the Japanese captured Wei-Hai-Wei.
 Feb. 7, the Japanese sank two Chinese war ships.
 Feb. 20, the Cuban revolution began.
 March 5, Sir Henry Rawlinson, the "Father of Assyriology," died.
 March 5, the Japanese captured Neu-Chwang.
 May 8, a treaty of peace between Japan and China was ratified at Chefoo.
 May 15, there was a revolt in the island of Formosa, and a republic was set up.

May 20, the United States Supreme Court declared the income tax null and void.
 June 17, the Harlem Ship Canal was opened.
 June 19, the Baltic Canal was opened.
 June 29, Thomas Henry Huxley died.
 Sept. 18, the Cotton States and International Exposition, at Atlanta, Ga., was opened.
 Sept. 27, the French captured Antananarivo, Madagascar.
 Sept. 28, Louis Pasteur died.
 Nov. 28, Alexandre Dumas, *fils*, died.

1896.

Jan. 1, the Jameson raiders were defeated by the Boers.
 Jan. 2, the Jameson raiders surrendered to the Boers.
 Jan. 4, Utah was admitted as a State.
 Jan. 5, Prof. W. K. Röntgen published his discovery of the X ray.
 Jan. 23, the annexation of Madagascar to France was proclaimed.
 March 2, an Italian army was disastrously defeated in Abyssinia.
 March 21, the Volunteers of America were organized by Ballington Booth.
 May 1, the Shah of Persia was assassinated.
 May 27, a cyclone struck St. Louis, Mo., causing great destruction of life and property.
 July 1, Harriet Beecher Stowe died.

1897.

Jan. 22, appearance of the plague in India caused a stoppage of all pilgrim traffic.
 March 1, Japan adopted the gold standard.
 March 7, the French exiled the Queen of Madagascar.
 March 25, at Tokat, in Anatolia, 700 Armenians were massacred. This was followed by several similar massacres.
 April 13, the bill creating the city of Greater New York passed the Legislature.
 April 17, Turkey declared war against Greece.
 May 1, the Centennial Exposition at Nashville, Tenn., was opened.
 May 10, the Exposition at Brussels, Belgium, was opened.
 June 14, the Venezuela boundary treaty was ratified.
 July 19, Jean Ingelow died.
 July 24, the Dingley tariff bill was signed by the President.
 Aug. 5, 6, a tidal wave on the coast of Japan destroyed many villages and thousands of lives.
 Aug. 25, President Borda, of Uruguay, was assassinated.
 Sept. 18, a treaty of peace between Turkey and Greece was signed.
 Oct. 21, the Yerkes telescope, the largest in the world, was dedicated at Lake Geneva, Wis.
 Oct. 29, Henry George died.
 Nov. 8, a treaty to protect the seals in Bering Sea was signed for the United States, Russia, and Japan.

1898.

Jan. 3, the British Government officially insisted on the "open door" in China.
 Feb. 8, President Barrios, of Guatemala, was assassinated.
 Feb. 14, the Maine was destroyed in Havana harbor.
 March 7, China leased Port Arthur to Russia for ninety-nine years.
 April 19, the United States declared war against Spain.
 May 1, the American fleet destroyed the Spanish fleet in Manila Bay.

May 2, 3, there were serious bread riots in Italian cities.

May 19, William Ewart Gladstone died.

June 1, the Trans-Mississippi Exposition was opened at Omaha.

July 1, the battles of San Juan Hill and El Caney, Cuba, were fought.

July 3, the Spanish fleet, trying to escape from Santiago, was destroyed by the American fleet.

July 18, the Spanish army in Cuba surrendered to the Americans.

July 30, Prince Bismarck died.

Aug. 13, the planet Eros was discovered.

Sept. 2, Gen. Kitchener won a victory over the dervishes at Omdurman.

Sept. 10, the Empress of Austria was assassinated.

Sept. 20, Gen. Kitchener took possession of Fashoda.

1899.

Jan. 1, the United States assumed sovereignty over Cuba.

Feb. 1, the American flag was raised on the island of Guam, in the Ladrões.

Feb. 4, the Tagalog tribe, in the Philippines, began war against the United States authorities.

Feb. 10, the President signed the treaty of peace with Spain.

Feb. 16, President Faure of France died.

Feb. 18, Émile Loubet was elected President of France.

March 28, messages were exchanged across the English Channel by wireless telegraphy.

April 1, the allied English and American troops fought Mataafa's army in the Samoan Islands.

May 18, the Universal Peace Conference assembled at The Hague.

Sept. 10, the Transvaal Government demanded as an ultimatum the withdrawal of British troops from their threatening position on the border. This was virtually the beginning of the South African War.

Sept. 11, the Orange Free State burghers invaded Natal.

Oct. 16, the Dismal Swamp Canal was opened.

1900.

Jan. 16, the United States Senate ratified the Samoan treaty.

Jan. 20, John Ruskin died.

Feb. 27, the Boers under Gen. Cronje surrendered to Lord Roberts.

Feb. 28, the siege of Ladysmith was raised.

March 13, British troops entered Bloemfontein, the capital of the Orange Free State.

March 14, President McKinley signed the gold standard bill.

March 27, Gen. Joubert died.

April 14, a world's fair was opened in Paris.

April 26, Hull and a portion of Ottawa, Canada, were burned and 12,000 persons were rendered homeless. The loss was estimated at \$15,000,000.

June 5, British troops entered Pretoria, the capital of the South African Republic.

June 17, the allies captured the Taku forts in China.

June 19, the Chinese began their attacks on the legations in Peking.

June 30, a fire on the wharves of Hoboken, N. J., destroyed several hundred lives and shipping and other property to the amount of about \$10,000,000.

July 14, the allies captured Tientsin, China.

July 30, King Humbert of Italy was assassinated.

Sept. 1, Lord Roberts proclaimed the annexation of the Transvaal Republic to the British Empire.

Sept. 6, the Duke of Abruzzi's polar expedition re-

ported that it had visited the highest northern latitude ever reached—86° 33'.

Sept. 8, Galveston, Texas, was struck by a tornado, which destroyed about 7,000 lives and about \$30,000,000 worth of property.

Oct. 22, John Sherman died.

Nov. 5, a convention to frame a constitution for Cuba began its sessions in Havana.

NORTH CAROLINA, a Southern State, one of the original thirteen, ratified the Constitution Nov. 21, 1789; area, 52,250 square miles. The population, according to each decennial census, was 393,751 in 1790; 478,103 in 1800; 555,500 in 1810; 638,829 in 1820; 737,987 in 1830; 753,419 in 1840; 869,039 in 1850; 992,622 in 1860; 1,071,361 in 1870; 1,399,750 in 1880; 1,617,947 in 1890; and 1,893,810 in 1900. Capital, Raleigh.

Government.—The following were the State officers during the year: Governor, Daniel L. Russell, Republican; Lieutenant Governor, C. A. Reynolds, Republican; Secretary of State, Cyrus Thompson, Populist; Treasurer, W. H. Worth, Populist; Auditor, H. W. Ayer, Populist; Attorney-General, Z. V. Walser, Republican; Adjutant General, B. S. Royster, Democrat; Superintendent of Instruction, C. H. Mebane, Populist; Commissioner of Agriculture, John R. Smith, Republican; Insurance Commissioner, James R. Young, Democrat; Labor Commissioner, J. V. Hamrick, Populist; Railroad Commissioners, R. B. Royster, L. C. Caldwell, J. H. Pearson, and D. H. Abbott; Chief Justice of the Supreme Court, William T. Faircloth, Republican; Associate Justices, R. M. Douglas, Republican; Walter Clark, Democrat; D. M. Furches, Republican; W. A. Montgomery, Democrat; Clerk, Thomas S. Kenan, Democrat.

Population.—The population by counties, according to the census of 1900, is as follows: Alamance, 25,665; Alexander, 10,960; Alleghany, 7,759; Anson, 21,970; Ashe, 19,581; Beaufort, 26,404; Bertie, 20,538; Bladen, 17,677; Brunswick, 12,657; Buncombe, 44,288; Burke, 15,699; Cabarrus, 22,456; Caldwell, 15,694; Camden, 5,474; Carteret, 11,811; Caswell, 15,028; Catawba, 22,133; Chatham, 23,912; Cherokee, 11,860; Chowan, 10,258; Clay, 4,532; Cleveland, 25,078; Columbus, 21,274; Craven, 24,160; Cumberland, 29,249; Currituck, 6,529; Dare, 4,757; Davidson, 23,403; Davie, 12,115; Duplin, 22,405; Durham, 26,233; Edgecombe, 26,591; Forsyth, 35,261; Franklin, 25,116; Gaston, 27,903; Gates, 10,413; Graham, 4,343; Granville, 23,263; Greene, 12,038; Guilford, 39,074; Halifax, 30,793; Harnett, 15,988; Haywood, 16,222; Henderson, 14,104; Hertford, 14,294; Hyde, 9,278; Iredell, 29,064; Jackson, 11,853; Johnston, 32,250; Jones, 8,226; Lenoir, 18,639; Lincoln, 15,498; McDowell, 12,567; Macon, 12,104; Madison, 20,644; Martin, 15,383; Mecklenburg, 55,268; Mitchell, 15,221; Montgomery, 14,197; Moore, 23,622; Nash, 25,478; New Hanover, 25,785; Northampton, 21,150; Onslow, 11,940; Orange, 14,690; Pamlico, 8,045; Pasquotank, 13,660; Pender, 13,381; Perquimans, 10,091; Person, 16,685; Pitt, 30,889; Polk, 7,004; Randolph, 28,232; Richmond, 28,408; Robeson, 40,371; Rockingham, 33,163; Rowan, 31,066; Rutherford, 25,101; Sampson, 26,380; Stanly, 15,220; Stokes, 19,866; Surry, 25,515; Swain, 8,401; Transylvania, 6,620; Tyrrell, 4,980; Union, 27,156; Vance, 16,684; Wake, 54,626; Warren, 19,151; Washington, 10,608; Watauga, 13,417; Wayne, 31,356; Wilkes, 26,872; Wilson, 23,596; Yadkin, 11,464.

Finances.—On Nov. 30, 1900, the balance in the treasury was \$124,362.72; of this amount, \$23,219.50 was of the educational fund, while the remainder belonged to the general fund. This does not include amounts against which there were

outstanding warrants. The actual cash balance in the treasury was \$124,559.19.

The receipts of the public fund for the fiscal year ending Nov. 30 were \$1,618,103.91, which is an increase of \$72,386.22 over the year 1899. The disbursements for the same year were \$1,647,324.99, an increase of expenditures over 1899 of \$51,618.92.

The Auditor's report shows a decrease in the assessed value of railroad property, compared with 1899, as well as a decrease in the steamboat and canal property. There is an increase in the value of telegraph and telephone property.

In regard to pensions, the report says the number of pensioners dropped from the pension roll for various causes during the year was 385. The total number of pensioners was 6,129, and the total amount expended for pensions was \$119,070. The total amount expended for pensions since 1876 is \$1,336,546.76.

The present interest-bearing debt of the State amounts to \$6,287,350. The noninterest-bearing debt amounts to \$240,420.

Insurance.—An insurance department was established in 1899. The organizations licensed to do business in the State under the new law included 29 life companies, 87 fire and marine companies, 13 fidelity and casualty companies, and 22 fraternal orders. In the fiscal year ending April 1, 1900, the commissioner collected for taxes on gross receipts \$57,147.87; for licenses, \$26,533.34; for fees, \$6,364; for licenses of subagents, \$2,820; total, \$92,865.21.

Railroads.—A long railroad tax suit was ended in January, 1901. In its annual report, the Corporation Commission gives the following account of the condition of the railroads of the State: "The gross earnings of all the railroads from operation in North Carolina were \$14,919,832, against \$12,995,725 for 1899, while the operating expenses were \$9,336,681, against \$8,186,500 for 1899; so that the income from operation was \$5,582,950, against \$4,809,235 for 1899. Sixty-three miles were added to the railroad mileage of North Carolina during the year. Not a railroad in the State is in the hands of a receiver. The Wilmington and Weldon Railroad Company, the Norfolk and Carolina Railroad Company, the Atlantic Coast Line Railroad Company of South Carolina, the Atlantic Coast Line Railroad Company of Virginia, and the Southeastern Railroad Company were consolidated April 23, 1900, and have since been operated as the Atlantic Coast Line Railroad Company. This new corporation owns 1,711.24 miles of railroad."

Banks.—Twenty-six new banks were organized in 1900, so that there are 92 State banks in operation in the State, as follow: Fifty-six under charters with general banking houses, 10 savings banks, and 26 private banks. These banks have a capital of \$2,686,383.47, against a capital for 1899 of \$2,307,397.80, making an increase of \$379,085.67. They have deposits amounting to \$8,674,655.50, against \$6,511,640.71 for 1899, an increase of \$2,163,014.79. The total resources of the State banks, as shown by their last report, were \$14,617,959.64.

Education.—According to the census of 1870, the number of illiterate white men in North Carolina was 33,111; in 1880, 44,420; in 1890, 49,570; and at the last date it was shown that there were 13,000 white men who could read but could not write. The North Carolina College of Agriculture and Mechanic Arts had in 1900 an enrollment of 302 students. They earned by working odd hours during the session \$2,300. There are full courses and short courses. It offers practical and technical education in agriculture, stock raising,

horticulture, mechanical engineering, civil engineering, electrical engineering, textile industry, chemistry, and architecture. It also offers practical training in carpentry, wood turning, blacksmithing, machinery work, mill work, boiler tending, engine tending, and dynamo tending. Instruction is given in English, mathematics, history, civics, political economy, physics, chemistry, botany, zoölogy, physiology, physical geography, geology, and mineralogy. In his annual report President Winston described the pressing need felt for rooms and equipment of all kinds.

The Educational Committee of the North Carolina Teachers' Assembly report that the public schools are in a chaotic state, and that there is complete lack of co-operation. They outline a plan for improvement. By a decision of the Supreme Court, the fines collected by towns and cities upon prosecutions for violation of the criminal laws of the State must all go into the common-school fund, and not into the treasuries of the towns and cities. The Legislature was asked to appropriate \$300,000 to secure four months' schooling during the year in each county, which never has been done.

The Agricultural and Mechanical College for the colored race, which was established by the State in 1891 in Greensboro, has been greatly crippled during the past two years because \$10,000 has been cut off from the regular appropriation by the Legislature. The course of study and manual work includes wood turning, carpentering, forging, barn and dairy work, and greenhouse work, including grafting, potting, and making cuttings. The department of domestic science includes the chemistry of cooking, cutting and fitting as well as general sewing, milk testing, and butter making. It is the high school for colored boys and girls over fourteen years of age, and is principally fed from the public schools. There is a tuition fee of \$1 a month, while a certain number of students from each county are admitted free.

State Institutions.—The Confederate Soldiers' Home has had a fine hospital building added, with modern equipment. It has 56 inmates.

The Central Hospital for the Insane, at Raleigh, receives \$50,000 a year from the State. It has 500 patients. The building of two new wards allows of the separation of the women from the men. The Executive Committee complains that the dangerous insane are not properly cared for, and can not be under present conditions.

The Penitentiary is self-supporting, and at the last report had \$101,668 in available cash assets. In his report the manager says: "We have contracts for labor on railroads, in shirt factory and on other works, that bring into our treasury \$4,000 to \$4,500 of earnings per month. We certainly will have an income from the brickyard of \$25,000; these items together with other available moneys for labor, etc., the supplies on hand, as shown by the inventories, should be amply sufficient to run the institution during this year without any embarrassment to the management."

The report of Dr. J. F. Miller, superintendent of the State Hospital, at Goldsboro, shows that in the biennial period of 1899-1900 651 patients were treated, with a general average of 454. The percentage of cures was a little over 49, and the percentage of deaths a little over 6; and there were remaining in the hospital, Nov. 30, 439 patients.

A special committee appointed to investigate the State prisons reported extravagance and incompetency.

Industries.—There has been a great revival or establishment in certain industries. Many new cotton mills were built in 1900, some of them of

great capacity. The increase in cotton acreage in the South is placed at 8.7 per cent.; number of acres, 25,558,000, an increase over 1899 of 2,036,000. Ten per cent. of the increase is in North Carolina. Small fruits are beginning to be largely cultivated. Strawberry raising employs 700 Northern persons, who have invested in land and who ship the fruit north. All fruits grow well in the middle of the State, and cultivation on large plantations is increasing. The soil and climate are especially adapted to apple raising. Northern capital is about to establish a great sheep ranch in the mountain region in Burke County.

Political.—The Democratic convention assembled in Raleigh, April 11. The platform approved the national platform of 1896, and further declared: "We denounce the tariff legislation of the Republican party which has increased the burdens



CHARLES B. AYCOCK,
GOVERNOR OF NORTH CAROLINA.

of taxation upon our consumers and increased the powers of the trusts and monopolies to rob the people.

"We denounce the Republican party for its passage of the recent legislation by which the gold standard has been fixed upon our people.

"We are in favor of peaceful commercial expansion, but denounce imperialism and militarism.

"We admire the heroism and ability with which the Hon. William Jennings Bryan has defended the principles of the Democratic party, and hereby instruct the delegation from this State to the next national Democratic convention to vote for his renomination.

"We denounce the administration of the Republican party in North Carolina by which negroes were placed in high and responsible official positions which ought to have been filled by white people.

"We condemn free passes.

"We favor the election of United States Senators by the people.

"We instruct the State Executive Committee to make provision for the holding of a primary on the first Tuesday of next November for the selection of a United States Senator by the Democratic voters of the State, at which every elector who has voted the Democratic ticket in the State election shall be entitled to cast one vote for one man for United States Senate, and the candidates who receive the majority of the votes so cast in the whole State shall receive the support of the Democratic members of the Legislature."

The platform adopted by the Republican convention, May 2, contained these declarations:

"In spite of the official records, which show that there has been no negro domination, and no possibility of negro domination in the State or in any of its counties, during the past quarter of a century, the Democratic leaders have determined to wage the coming campaign upon the race issue alone, and they go before the people with a scheme of disfranchisement which is the most impudent assault upon the Constitution of the United States

and the most shocking act of party perfidy ever attempted by men who recognize the obligation of an oath or the sanctity of a public pledge. We denounce with indignation and abhorrence the Democratic proposition that the right to vote should be made dependent upon heredity, and thus build up an aristocracy of birth upon the ruins of free government.

"The administration of the affairs of the State and of the several counties during four years of Republican ascendancy has been scrupulously clean, faithful, and economical. During this period the credit of the State, as shown by the market value of its bonds, has reached the highest point known in our history, and we challenge a comparison of this record with that of the Democracy during any like period.

"We are opposed to combinations of capital whenever they become destructive of rights of individual citizens, and such combinations should be suppressed by adequate statutes enacted by the Legislatures of the several States, or by Congress if the resulting evils are beyond the power and jurisdiction of the States.

"The Republican party has always fostered popular education; that party engrafted in the organic law of the State the mandatory requirements providing public schools for both whites and blacks, but that party will never brand ignorance as a crime whose penalty is disfranchisement, so long as the cause of that ignorance is the neglect of the State."

The following State officers (all Democrats) were elected: Governor, C. B. Aycock; Lieutenant Governor, W. D. Turner; Secretary of State, J. R. Grimes; Treasurer, B. R. Lacey; Auditor, B. F. Dixon; Attorney-General, R. D. Gilmer; Superintendent of Education, T. F. Toon; Commissioner of Agriculture, S. L. Patterson; Commissioner of Insurance, James R. Young; Adjutant General, B. S. Royster.

The important issue in the election was the following amendment to the State Constitution, which was submitted to the people:

"SECTION 1. Every male person born in the United States, and every male person who has been naturalized, twenty-one years of age, and possessing the qualifications set out in this article, shall be entitled to vote at any election by the people in the State, except as herein otherwise provided.

"SEC. 2. He shall have resided in the State of North Carolina for two years, in the county six months, and in the precinct, ward, or other election district in which he offers to vote four months next preceding the election: Provided, that removal from one precinct, ward, or other election district to another in the same county shall not operate to deprive any person of the right to vote in the precinct, ward, or other election district from which he has removed until four months after such removal. No person who has been convicted, or who has confessed his guilt in open court upon indictment, of any crime, the punishment of which now is, or may hereafter be, imprisonment in the State's Prison, shall be permitted to vote unless the said person shall be restored to citizenship in the manner prescribed by law.

"SEC. 3. Every person offering to vote shall be at the time a legally registered voter as herein prescribed and in the manner hereafter provided by law, and the General Assembly of North Carolina shall enact general registration laws to carry into effect the provisions of this article.

"SEC. 4. Every person presenting himself for registration shall be able to read and write any section

of the Constitution in the English language; and, before he shall be entitled to vote, he shall have paid on or before the first day of May, of the year in which he proposes to vote, his poll tax for the previous year as prescribed by Article V, section 1, of the Constitution. But no male person who was on Jan. 1, 1867, or at any time prior thereto, entitled to vote under the laws of any State in the United States wherein he then resided, and no lineal descendant of any such person, shall be denied the right to register and vote at any election in this State by reason of his failure to possess the educational qualification herein prescribed: Provided, he shall have registered in accordance with the terms of this section prior to Dec. 1, 1908.

"The General Assembly shall provide for the registration of all persons entitled to vote without the educational qualifications herein prescribed, and shall, on or before Nov. 1, 1908, provide for the making of a permanent record of such registration, and all persons so registered shall forever thereafter have the right to vote in all elections by the people in this State, unless disqualified under section 2 of this article: Provided, such person shall have paid his poll tax as above required.

"SEC. 5. That this amendment to the Constitution is presented and adopted as one indivisible plan for the regulation of the suffrage, with the intent and purpose to so connect the different parts, and to make them so dependent upon each other, that the whole shall stand or fall together."

The amendment was adopted by a large majority. It is to go into effect July 1, 1900.

At the presidential election in November the State Democratic electoral ticket received 157,736 votes and the Republican 132,997. The Democratic majority was thus about 5,000 greater than in 1896.

NORTH DAKOTA, a Northwestern State, admitted to the Union Nov. 3, 1889; area, 70,795 square miles. The population in 1890 was 182,719; in 1900 it was 319,146. Capital, Bismarck.

Government.—The following were the State officers in 1900: Governor, Frederick B. Fancher; Lieutenant Governor, J. M. Devine; Secretary of State, Fred Falley; Treasurer, D. W. Driscoll; Auditor, A. N. Carlblom; Attorney-General, John F. Cowan; Superintendent of Education, J. G. Halland; Adjutant General, Elliott S. Miller; Commissioner of Insurance, George W. Harrison; Commissioner of Agriculture, H. U. Thomas; State Examiner, H. A. Langlie; Railroad Commissioners, Luke L. Walton, John Simons, Henry Erickson; Land Commissioner, D. J. Laxdal; Superintendent of Irrigation and Forestry, W. W. Barrett; Oil Inspector, P. B. Wickham; Game Warden, G. E. Bowers; Chief Justice of the Supreme Court, J. M. Bartholomew; Associate Justices, Alfred Wallin, N. C. Young; Clerk, R. D. Hoskins—all Republicans.

The State officers are elected for two years in November of the even-numbered years. The Legislature meets biennially in January of the odd-numbered years.

Population.—The increase of population in the State during the decade was 74.6 per cent. Some counties—like Williams, Wells, and others in which the settlement has been unusually rapid—show increases of several hundred per cent. All the counties show increases, but the greatest percentage is in the central and western parts of the State.

The cities having more than 2,000 inhabitants are:

CITIES.	1890.	1900.
Fargo.....	5,664	9,589
Grand Forks.....	4,979	7,552
Bismarck.....	2,183	8,319
Jamestown.....	2,296	2,253
Valley City.....	1,089	2,246
Grafton.....	1,594	2,378
Wahpeton.....	1,510	2,228
Dickinson.....	897	2,076

Dickinson's remarkable growth, 131 per cent., is due to the development of the western part of the State. Valley City, with 124 per cent. increase, has been aided by the "Soo" Railroad.

Finances.—The semi-annual statement of the Treasurer, published in August, shows the receipts and disbursements of his office for the six months ending July 1. The statement shows a total balance in the various funds, Jan. 1, of \$209,888.79, of which \$59,060.19 was in the general funds. The receipts from all sources in the six-months period was \$703,147.94, and the disbursements \$736,610.73, leaving a balance on hand July 1, 1900, of \$167,426. Of this amount \$40,289.36 was in the general fund. The miscellaneous receipts from various sources of revenue, including fees of State officers and similar sources, was \$138,850.76. The total receipts to the general fund from taxes, paid in by the counties, was \$341,068.98.

The tuition fund, distributed for the benefit of the schools of the State, received \$4,395.40 from fines through the State. From the interest and income fund, turned into the State tuition fund from interest paid on State school funds, land contracts, etc., the total receipts are \$98,646.84. The interest on bonds held by the permanent school funds of the State aggregates \$21,069.71, and the interest on mortgages \$4,456.95. The total receipts from installments on farm loans made on agricultural lands throughout the State from the permanent school fund were \$8,417, and the redemption of bonds aggregated about \$6,000. The sale of Government lands, of which by a recent law the State receives 5 per cent., brought in \$3,219.80.

Among the items of disbursement were \$100 for the conviction of horse thieves, \$17,076 from the wolf bounty fund in the redemption of certificates, and \$18,000 interest on the public debt.

The statement of balances shows \$40,289 in the general fund, \$58,302 in the bond interest fund, \$11,000 in the school fund, \$14,000 in the tuition fund, \$1,600 in the wolf bounty fund, \$15,000 in the establishment fund for the twine and cordage plant, and \$16,000 in the operating fund for the same institution.

There was a total of \$39,033 in suspended banks, Dec. 31, 1899, and of this \$2,953.70 was collected in dividends during the six months. Of the balance shown in the general fund, the amount in suspended banks is included.

Valuations.—The total valuation of the State this year, as fixed by the Board of Equalization, was about \$4,000,000 more than in 1899. The amount was \$117,789,615, of which the sum of \$73,304,983 is real property, \$17,367,525 is railroad property, and \$27,117,107 is personal property.

The largest single item of personal valuation is that of horses over three years old. There are 204,240 returned by the assessors, and the average value is a little over \$30, making the total value \$6,735,244. The total assessed valuation of all classes of horses in the State is about \$7,500,000, and of cattle about \$5,000,000.

There are 114,000 head of cattle one year old returned this year, against 93,000 last year; of two-year-old cattle, 88,000 this year, against 64,

000 last year; last year there were 136,000 cows returned, and this year 157,000.

The number of sheep returned last year was 265,000, and this year 306,000.

The railroads were valued at the same rate as in 1899, an average of \$6,500 a mile. A small increase of mileage added a little to the total.

The tax rate was made the same, 3.8 mills for general State purposes, 0.5 mill for bond interest, and 0.2 mill for wolf bounty. The amounts ordered raised by the State board are: For general purposes, \$447,600; for interest on the State debt, \$58,894; and for wolf bounty, \$22,507.

Education.—The school population this year was 92,347, an increase of 8,038 over that of 1899. The largest increase is in those counties in which there was the greatest amount of immigration from other States. About 400 new schoolhouses have been built. Formerly a tax of 2 mills was levied on all property in the State for school purposes, and the amount was apportioned according to the number of children. By the present law the tax in each county is apportioned in the county. From the State are received only fines and the income of the permanent school fund. This fund now amounts to about \$920,000.

The normal schools have each an attendance of about 200.

The Agricultural College has about 290 students, nearly 100 of whom were taking a farm course of three months.

The State High School Board has prepared a uniform course of study for the high schools, and the superintendent one for the common schools; so that pupils may pass upon certificate from any grammar school to any high school, and from a high school to the university.

The university opened with an attendance 50 per cent. larger this autumn than at the same time in 1899.

The enrollment at the Indian schools in the State was 1,152, and the average attendance 1,223. A new building is to be erected for the Grand River school.

Charities and Corrections.—The Asylum for the Insane had 344 patients in June. A new ward building and a laundry were built with the \$50,000 from the bond issue authorized by the Legislature, and another ward building is needed. Ten years ago it cost the State \$305.15 for every patient in the hospital. For the biennial period just closed the cost of maintenance was \$154.39, and this amount is \$20 less than in the preceding biennial period. The patients are now maintained at the institution at an average cost of \$11.87 a month.

The report of the School for the Deaf, at Devil's Lake, shows an expenditure during the biennial period of \$19,870 for improvements, bringing the value of the property of the institution up to \$42,370. The attendance during the past year was 59, of whom 27 were boys and 32 girls.

The State has no institution for the blind, but sends 9 pupils this year to the South Dakota School for the Blind.

During the first year of the State Manual Training School 160 students were enrolled, and 50 others were denied admission, the equipment being insufficient.

The biennial report of the Penitentiary shows that there were 122 convicts at the end of the year. The twine plant was finished and put into operation in March. There are three buildings, fitted with machinery sufficient for turning out 10,000 pounds of binding twine a day. A complete electric plant and a new inclosing wall are among the other improvements.

Military.—The State militia in 1899 consisted of: General staff, 9; cavalry, officers 7, enlisted men 44; light battery, officers 3, enlisted men 53; infantry, officers 40, enlisted men 517; total, 673.

A monument to the memory of the soldiers of Company C of the North Dakota Volunteers who fell in the Philippines was dedicated at Grafton in October. It was built by citizens of Grafton and Walsh Counties.

The new military post at Bismarck is to be called "Fort Abraham Lincoln."

Banks.—Under the new law permitting banks to organize with less than \$50,000 capital, 8 have been added to the national banks of the State. There were 27 in October, and the abstract of their condition, compared with that of the 24 in June, shows that the total resources increased from \$7,723,984 to \$8,046,884; loans and discounts increased from \$5,330,032 to \$5,415,750, and cash reserve decreased from \$376,769 to \$375,814, of which gold holdings fell from \$150,477 to \$146,200; individual deposits increased from \$4,817,994 to \$5,015,981 and the average reserve held advanced from 17.30 to 20.01 per cent.

The resources of the 119 State banks of North Dakota at the close of business Feb. 13 were \$8,590,050.21. Of this, \$5,472,809.71 were in loans and discounts. Due from other banks, \$1,559,956.62, with total cash on hand of \$770,317. The total capital stock was \$1,378,500. Deposits subject to check and certificates of deposit amounted to \$6,486,713.85. Of surplus and undivided profits there were \$521,392.

Railroads.—The first spike in the Bismarck, Washburn and Great Falls Railway was driven May 17. This road will give transportation facilities to the residents on 300,000 acres of farming lands in the fertile region north of Bismarck. Washburn is 45 miles north by west of Bismarck. The track was carried into Wilton in July. This is a new town in the lignite district, 24 miles north of Bismarck.

All the roads in the State reduced their passage rates to 3 cents a mile in April. It is found that about half the 520,000 trees planted along the Northern Pacific in the spring were killed by the dry summer, and it is promised that they shall be replaced the coming spring.

Orders have been issued to Great Northern express agents to refuse all C. O. D. shipments of liquor. Suits had been brought against several agents for violation of the law by the practice of receiving such consignments.

Insurance.—The report of the Insurance Commissioner for 1899 shows that the fire, life, accident, and other companies collected \$1,302,785.50 in premiums alone, on which the State receives \$32,569.63 in taxes, the State law providing for a tax of 2 per cent. on gross premiums.

Seven new companies have entered the State, and several that withdrew after the great fire at Fargo have returned. The mutual hail and fire companies suffered severely from the hailstorms of the summer, their losses amounting to \$105,749. Two of them went into the hands of receivers. The volunteer firemen receive a part of the insurance tax.

Public Lands.—The land office at Devil's Lake for the last year did the greatest business of any office in the United States. The receipts for the office for the year were about \$175,000. This business is due largely to the immigration business done by the Great Northern and the many settlers who have taken up land along the line in the Devil's Lake district. The Minot and Bismarck offices also showed large receipts.

The total amount of net revenue from the land

offices in North Dakota for the past fiscal year was \$314,661.91.

Products.—The coal mining industry is attracting much attention, and promises important results to the State. Wilton, a new town to which a railroad was built from Bismarck this year, is the new center of activity. Tests have been made of the lignite coal mined there, and it is found to be economical and otherwise satisfactory. A test conducted at a woolen mill showed a saving of about 20 per cent. over the cost of wood. It is found to be agreeable for household use also, burning without clinkers and giving out smoke more like that from wood than like ordinary coal smoke. A test showed the lignite to have a value of 63 per cent. of bituminous coal. Taking into account the cost of the two when delivered, a saving of 81 cents a ton was figured for the lignite. New electric machinery has been put in, which is expected to raise the output to about 350 tons a day. The coal product of the State in 1899 was 98,809 tons, valued at \$117,500. Some of the reservation Indians are finding employment in the lignite fields.

Prof. Babcock, of the State University, who is making a geological survey of the State, says the clays are valuable, and are being developed. In the northern part of the State a good quality of Portland cement is being made, and in the western part excellent clay for pottery, fire brick, and building brick is worked.

The acreage of wheat, as shown by the assessors' returns in September, was 3,846,406, and that of flax 1,203,767. The yield was, however, small in proportion. The wheat crop was estimated to be from 15,000,000 to 20,000,000 bushels.

The creamery industry is growing in the western part of the State.

The Commissioner of Forestry recommends the experiment of raising fish in artesian waters, which he has found successful. There are nearly 700 flowing artesian wells in the State.

Many filings have been made for land under the provisions of the reservoir law, under which law any one can reserve and have the use of 160 acres of land in one section for fifty years, providing he builds a reservoir that will contain 1,500,000 gallons of water; such reservoir must be on the same section with the land reserved. It is not probable that all or many of those so filing will build reservoirs. But filing upon the land keeps other settlers off, and stockmen, by the payment of the filing fees, may have the use of the land until the entries are canceled, and in the meantime secure the use of the land.

Political.—State officers were elected in November. The Republicans held conventions May 16 and July 11; the Democrats, June 6 and July 20; the People's party, April 6, June 28, and July 20. A part of the People's party united with the Democrats; the "middle of the road" section put out a ticket. There were also a Prohibitionist ticket and a Social-Democratic.

The Republicans urged Congress to take steps to suppress the evil of trusts, and favored the retention by the United States of every foot of territory now under the flag. They approved the enactment into law of the currency bill and the entire policy of the Administration. The party was pledged to sustain the prohibitory law.

Gov. F. B. Fancher was renominated, and Frank White was made the candidate for Lieutenant Governor. Gov. Fancher withdrew from the ticket on account of failing health, Sept. 25, and the State Committee named Frank White for the first place and David Bartlett for the second, so that the ticket finally stood: For Judge of the Supreme

Court, D. E. Morgan; Governor, Frank White; Lieutenant Governor, David Bartlett; Treasurer, D. H. McMillan; Attorney-General, O. D. Comstock; Auditor, A. N. Carlblom; Superintendent of Public Instruction, J. M. Devine; Secretary of State, E. F. Porter; Commissioner of Insurance, Ferd. Leutz; Commissioner of Agriculture and Labor, R. J. Turner; Railroad Commissioners, J. F. Shea, C. J. Lord, J. J. Youngblood.

The Democrats declared allegiance to the platform of 1896, advocated the election of United States Senators by popular vote, denounced imperialism, and instructed delegates to Kansas City for William J. Bryan. They favored abolition of customs duties between the United States and Porto Rico, and declared for an income tax. The fusion ticket was: For Governor, Max A. Wiperman; Lieutenant Governor, F. W. McLean; Secretary of State, J. F. Williams; Auditor, Samuel



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K. McGinnis; Treasurer, J. P. Birdier; Superintendent of Public Instruction, Mrs. Laura J. Eishuth; Insurance Commissioner, W. W. Campbell; Attorney-General, John Carmody; Commissioner of Agriculture, Samuel Torgeson; Railroad Commissioners, James Morrison, L. L. Lewis, L. Stavnheim. Mr. Williams and Mr. Stavnheim withdrew, and their places were filled by J. J. Stampen and Julius Wirkus.

The nominations of the People's party were: For Governor, O. G. Major; Lieutenant Governor, James T. Westlake; Secretary of State, Frank Wrightson; Auditor, Robert Grant; Treasurer, W. W. Cummings; Attorney-General, H. F. Jones; Commissioner of Agriculture and Labor, James Glassford; Commissioners of Railroads, James McIntosh, John Miller, W. J. Forest.

The Prohibition candidates were: For Governor, Delevan Carlton; Lieutenant Governor, W. C. Greene; Treasurer, B. H. Tibbits; Auditor, D. F. Humphreys; Secretary of State, George M. Naylor; Commissioner of Agriculture, M. F. Vandebogart.

The Social-Democratic ticket, which was filed by petition in August, was as follows: For Governor, George W. Poague; Lieutenant Governor, Royal F. King; Secretary of State, A. Bassett; State Auditor, R. C. Massey; State Treasurer, L. F. Dow; Attorney-General, A. Le Sueur; Superintendent, G. W. Attlebury; Commissioner of Insurance, R. W. Simpkins; Railroad Commissioners, William Lamb, F. J. F. Tucker, James Nelson; Commissioner of Agriculture, S. E. Haight.

The Republican ticket was successful at the polls. For presidential electors the vote stood: McKinley, 35,891; Bryan, 20,519; Woolley, 731; Debs, 518; Barker, 110. For Governor: White, 34,052; Wiperman, 22,275; Carlton, 560; Poague, 425; Major, 213.

The Legislature will be composed of 82 Republicans and 11 fusionists.

Two constitutional amendments were voted upon, and were carried by large majorities. The first was for the creation of a board of pardons, to consist of the Governor, the Chief Justice of the Supreme Court, and the Attorney-General. The vote was 33,260 for and 8,153 against. The second was to permit taxation of telegraph, telephone, express, and dining-car companies. This was carried by a vote of 32,674 for to 6,947 against.

NORTHWEST TERRITORIES OF CANADA. Politics and Government.—Mr. F. W. G. Haultain remained at the head of affairs during 1900, as he had since 1887. In the Government he was Attorney-General and Treasurer, with Mr. J. H. Ross as Commissioner of Agriculture and Public Works. The immense area of the territories, with their million square miles, is indicated by the existence of three nonresident members of the Government—Hillyard Mitchell, C. A. Magrath, of Lethbridge, and G. H. V. Bulyea, of Qu'Appelle. The Legislative Assembly met on March 29, 1900. The speech from the throne, which was read by Lieut.-Gov. A. E. Forget, contained these passages:

"The spontaneous expressions of loyalty with which all parts of the empire have given practical evidence of their devotion to the Queen and imperial interests will mark the past year as a memorable one in the history of the nation. Owing to the nonestablishment of the militia system, the territories were deprived of the privilege of being represented in the first Canadian contingent; but in the second contingent, and in that corps raised and equipped through the splendid generosity and patriotism of Lord Strathcona and Mount Royal, the territories have now the honor of having given not only a large number of men in the aggregate, but, in proportion to their population, a larger number than any other portion of the Dominion, to the Canadian contribution to the cause of the empire. In this connection you will be asked to concur in a grant made to the Northwest members of the second contingent, and your assent will be asked to a measure legalizing grants made by municipal corporations to various patriotic funds.

"The unprecedented rainfall and disastrous floods of the past year brought about a state of affairs which the revenue, already proved to be inadequate under ordinary conditions, was altogether unable to cope with. This state of affairs tended not so much to create as to aggravate and call more pointed attention to the great disproportion existing between the means at command and the ever-growing necessities of the rapidly increasing population of the territories. It is gratifying for me to be able to inform you that the Federal Government has proposed to Parliament, now in session, a moderate increase to your annual grant and a large special vote for the purpose of restoring public works destroyed by the floods. In spite of this very substantial increase to the revenue, my Government can only look upon it as affording a temporary and partial amelioration of otherwise impossible financial conditions, and will ask you to take action leading to the earliest practicable solution of territorial financial and administrative problems."

An interesting discussion took place on April 30, upon a motion that: "In the opinion of this house, it is detrimental to the best interests of the Northwest Territories, as long as our present status as territories exists, for members of the executive of this Government to take any active part in Federal politics." This was a direct attack

upon Mr. Haultain's well-known Conservative proclivities and his appearance upon Sir Charles Tupper's platform. It was voted down by 21 to 6. On May 2 the local demands for a full provincial position and better financial terms found expression in the following resolution, moved by Mr. Haultain and unanimously carried:

"That an humble address to his Excellency the Governor General be adopted by this house, praying him that he will be pleased to cause the fullest inquiry to be made into the position of the territories, financial and otherwise, and to cause such action to be taken as will provide for their present and immediate welfare and good government, as well as the due fulfillment of the duties and obligations of government and legislation assumed, with respect to these territories, by the Parliament of Canada; and that

"Whereas, By the British North America act, 1871, it was (among other things) enacted that the Parliament of Canada may from time to time establish new provinces in any territories forming for the time being part of the Dominion of Canada, but not included in any province thereof, and may, at the time of such establishment, make provision for the constitution and administration of . . . such provinces, his Excellency be also prayed to order inquiries to be made and accounts taken with a view to the settlement of the terms and conditions upon which the territories or any part thereof shall be established as a province, and that before any such province is established opportunity should be given to the people of the territories, through their accredited representatives, of considering and discussing such terms and conditions."

On May 4, a resolution was passed pointing out the rich productiveness of a large area of country north of the Qu'Appelle valley, in the district of Assiniboia, the difficulties of the settlers in obtaining transportation, the necessity of a railway, and the desirability of Dominion aid in its construction.

The Assembly adjourned on the same day, after the Lieutenant Governor had assented to the following ordinances, among others:

- Respecting the public lands of the territories.
- To amend chapter xxii of the ordinances of 1899, intituled "an ordinance respecting noxious weeds."
- Respecting the medical profession.
- Respecting hail insurance.
- Respecting assignments for the general benefit of creditors.
- Respecting the sale of intoxicating liquors.
- Respecting mortgages and sales of personal property.
- Respecting the incorporation of joint-stock companies.
- Respecting dentistry.
- Respecting mining companies.
- To secure compensation to workmen.
- Respecting foreign corporations.
- Respecting confirmation of sales of land for taxes.

An important incident of the session was a request from the Legislature to the Dominion Government, as a natural outcome of the military spirit of the moment, that the Federal militia system be extended to the Territories.

Finances.—The needs of the Government during the year were greater than the revenue, and resulted in an appeal to the Dominion, as given above, for further financial assistance. On May 1 the following sums were voted by the Assembly for the current year: Civil government, \$10,890; Attorney-General's department, \$3,579; Treasury Department, \$4,540; public works, \$7,980; agri-

culture, \$23,485; education, \$185,615; departmental expenses, \$8,235; legislation, \$23,205; administration of justice, \$9,700; maintenance of public works, \$7,975; repairs to public works, \$16,000; inspection of public works, \$7,500; construction of bridges, \$61,075; aid to local and municipal improvements, \$12,000; construction of roads, \$41,000; miscellaneous public works, \$38,000; hospitals, charities, and public health, \$9,350; sundry expenditures, \$2,404; total, \$482,483. In 1899 the expenditure had been \$357,025.

Calgary Exhibition and Agriculture.—One of the most important institutions in the territories is the annual exhibition at Calgary. It was opened on Sept. 12, 1900, by Lieut.-Gov. A. E. Forget, in the presence of a large audience representative of Alberta and the entire West. The speech of the Lieutenant Governor described two important branches of development in this part of the territories, and the following extracts are therefore given:

"You have around you, first of all, a vast and fertile region for ranching, suitable alike for cattle and horses, as well as in certain localities admirably adapted for the raising of sheep. The ever-increasing commerce in Alberta stock shows that these advantages have been recognized. You have as well in northern Alberta a splendid dairy country. The official report of the Northwest Government declares that it would be hard to find anywhere in the world a better dairy country than the foothills of the Rocky mountains and the Saskatchewan valley. It is not surprising to learn, therefore, that the settlers in these districts are rapidly turning their attention to an industry in which the whole of Canada is taking a foremost place in the markets of the world. As to the capabilities for grain growing, that is a prominent feature of a great portion of your district. There is the significant fact that central Alberta produces more wheat per acre than is produced in any part of the territories, and the other parts of Alberta far exceed the growth per acre that is found in any of the other provisional districts. Almost as pleasing a state of things applies to the yield of oats and barley, West Assiniboia alone being slightly ahead in these cereals.

"Another direction in which you are utilizing the resources of Nature is in regard to irrigation. It has been recognized that the future of the region adjacent to the Rocky mountains, from Calgary to the international boundary, is dependent to a large extent on irrigation. The difficulties of such a situation have been grappled with a vigor and energy that call for admiration. Wise legislation has been enacted, scientific astuteness has been exercised, skillful operations are at work."

In these territories there are about 350,000,000 acres, of which a large portion is available for farming, but only about 7,000,000 acres are as yet in the hands of farmers. One million acres are utilized for ranching. The agricultural progress has been steady, if slow. In 1898, 9,032,297 bushels of wheat, oats, and barley were produced. In 1899, 11,939,120 bushels of these cereals were raised. A few years ago there were no creameries or cheese factories in the territories. In 1898 there were 19 of the former and 13 of the latter. At the close of 1898 177 irrigation ditches and canals were in operation.

Education.—The educational system of the territories is under the control of a Council of Public Instruction, which includes the Executive Council and four appointed members without a vote. No school district can cover more than 25 square miles or contain fewer than 4 resident heads of families with a school population of 12.

No religious instruction is allowed in any public school before three o'clock, and then only subject to the wishes of the trustees and the parents. In 1899 there were 16,825 pupils in the public schools and 1,976 in the Roman Catholic schools. The average attendance, however, was only 8,331 in the one case and 1,084 in the latter.

NOVA SCOTIA, a maritime province of the Dominion of Canada; area, 20,907 square miles; population in 1891, 450,396. Capital, Halifax.

Government and Politics.—On Feb. 8, 1900, the third session of the thirty-second Parliament was opened by Lieut.-Gov. Sir Malachy Bowes Daly with a speech from the throne, in which he said:

"You have assembled to discharge your legislative duties at a time when unhappily our empire is engaged in a war which has already brought sorrow to thousands of British homes. While all must deeply regret the necessity for the conflict in South Africa, some consolation may be found in the splendid manifestation of loyalty which it has called forth not only in the motherland, but also throughout the colonies. Canada has promptly availed herself of the opportunity to testify her devotion to the interests of the empire by contributing two contingents of Canadian soldiers for service in South Africa. The organization and dispatching of these forces is a matter coming within the authority of the Government and Parliament of Canada, and I feel assured that whatever may be necessary to provide for our soldiers will be cheerfully voted by the representatives of our people in the federal sphere. But while we as a province are not called upon to contribute to this part of the outlay, there is an opportunity for the manifestation of our interest and sympathy by contributions to the patriotic fund that is being raised for the benefit of the wives and families of the men who have gone to Africa.

"I am happy to be able to assure you that the various branches of industry in which our people are engaged have been vigorously prosecuted during the year with the most satisfactory results, and that the province has enjoyed a degree of prosperity unexampled in its history. The output of our coal mines was much larger than in any preceding year.

"I rejoice to be able to record the progress that has been made during the year in the movement for the establishing of the great industry in the manufacture of iron and steel at Sydney. The large amount of capital subscribed for the purpose, and the extensive works already under construction, give assurance that the great enterprise will be carried to an early completion.

"I am glad to be able to inform you that very substantial progress has been made during the past year in several of the new railway enterprises of the province. In the case of the Inverness and Richmond Railway, to connect the Strait of Canso with the Broad Cove coal fields, my Government deemed the advantage of the line in relation to the development of our mineral resources to be so great as to justify the giving of an assurance to the company of something more than the ordinary subsidy, subject, however, to conditions which make the transaction one of undoubted provincial benefit. The company began work early last summer, and the railway is practically completed between the Strait of Canso and Port Hood. The work of constructing the Nova Scotia Midland Railway, which will give railway facilities to the country between Windsor and Truro, has been vigorously prosecuted, and is near completion. In the western part of our prov-

ince the Coast Railway has been opened as far as Barrington Passage, and negotiations are in progress for the renewal of the company's contract for the completion of the line from Yarmouth to Lockport. The Nova Scotia Southern Railway Company has performed a large amount of work on its lines.

"The promotion of interest in agricultural progress in this province has always been among the leading aims of my Government. The results of recent provincial exhibitions have shown the necessity for securing improved breeds of stock and extending this improvement to all parts of the province. You will be asked to make provision to enable the Government to take such steps in the way of importation of the best breeds of horses, cattle, and sheep as will tend to encourage the production of purer and better breeds of stock in all parts of the province. At the last session of the Legislature provision was made for the establishment of an agricultural and horticultural school. Before any active steps had been taken by my Government to carry the act into effect a project was submitted for the establishment of an interprovincial institution which would embrace not only agriculture and horticulture, but also mining and manual training. Such an institution, if it could be successfully established, would be an advantage to all the maritime provinces.

"My Government, as you are aware, has for some years past taken charge of the construction of the great bridges of the province, and most of these have been built of permanent material. As a complement to this undertaking it would seem desirable that many of the smaller bridges, especially on the chief thoroughfares of the province, should likewise be constructed of more durable material.

"The commissioners appointed to revise and consolidate the statutes have completed their labors, and the result will be submitted to you.

"Scientific investigation within the past few years has disclosed the serious consequences of the spread of tubercular diseases and the necessity of special endeavors not only to prevent the spread of the disease, but also to provide for its cure at the earlier stages. Sanitaria have been established in many parts of Europe and America especially devoted to the treatment of this form of disease. You will be asked to consider a measure designed to enable my Government to furnish adequate aid to the establishment of such institutions in this province."

The events of the session were largely nonpartisan, and as a consequence considerable useful legislation was put upon the statute books. Mr. G. H. Murray was still at the head of the Government, assisted by Messrs. J. W. Longley and C. E. Church at the head of departments, and by Messrs. Thomas Johnson, A. H. Comeau, A. McGillivray, T. R. Black, W. T. Pipes, and D. McPherson as ministers without portfolio. The revision of the statutes was matter of much discussion and the subject of a long speech by Attorney-General Longley. The South African War was a popular topic, and on March 1 a resolution of congratulation on the relief of Ladysmith was unanimously passed and sent to the Queen. An employer's liability for injuries act, introduced by the Premier on March 2, and passed, was largely a counterpart of the British act of 1880.

A measure was also passed providing for the borrowing and expenditure of \$300,000 for the construction of small bridges throughout the province, as was a bill preventing coal companies from assessing their employees for medical attendance which they can not control.

Among the numerous other acts passed were the following:

Respecting the revised statutes.

To amend chapter i of the acts of 1895, entitled An Act to amend and consolidate the acts relating to public instruction.

To establish a sanitarium, and to aid in the treatment and care of persons suffering from tubercular disease of the lungs.

To provide for the establishment of an agricultural and technical school for the maritime provinces.

For the encouragement of mining.

For the encouragement of manufacturing and shipbuilding.

To amend chapter ix of the acts of 1899, entitled An Act to provide for an agricultural college, and for the further encouragement of creameries.

For the improvement and better maintenance of certain roads.

To amend the Nova Scotia franchise act, 1889.

To amend chapter ii of the acts of 1895, entitled An Act respecting the sale of intoxicating liquors and the acts in amendment thereof.

To amend chapter ii of the acts of 1898, entitled An Act to consolidate and amend the acts relating to the property of married women.

To amend chapter xxv of the acts of 1898, entitled An Act of 1896, and to amend the Nova Scotia game act of 1890.

Respecting the maintenance of illegitimate children.

To amend chapter ii of the acts of 1895, entitled the liquor license act, 1895.

In September the Hon. A. G. Jones, an old-time Dominion Liberal leader, became Lieutenant Governor in succession to Sir M. B. Daly.

Finances.—The receipts for the province for the year ending Sept. 30, 1899, included \$17,636 from Crown lands, \$319,150 from mines, \$55,716 from public charities, \$432,806 from the Dominion annual subsidy, \$31,182 from succession duties. The total receipts were \$876,328. The expenditure amounted to \$852,379, and included \$24,310 upon agriculture, \$123,688 upon debenture interest, \$248,758 upon education, \$50,169 upon legislative expenses, \$115,643 upon public charities, \$83,990 upon road grants to municipalities, and the remainder upon various smaller demands. The special feature of the year's revenue, according to Mr. Murray's financial statement of Feb. 19, was the large receipt from mining royalties. The liabilities of the province were given by him as \$3,028,986 of provincial debentures, \$550,666 of special loans, and \$275,379 borrowed from banks in Halifax; a total of \$3,855,032. Against this were assets estimated at \$1,341,272. A loan of £164,000 placed on the London market at 3 per cent. had realized a minimum of 95, and had been regarded as high evidence of advancing public credit. The estimated revenue for 1900 included the annual Dominion subsidies and allowance of \$432,000, a royalty from mines of \$390,000, a revenue from Crown lands of \$28,000, from the Hospital for Insane of \$47,000, and from succession duties of \$25,000. The estimated expenditure included \$251,500 upon education, \$126,600 upon public charities, \$111,881 upon roads and bridges, and \$148,052 upon debenture interest.

Education.—The annual report of Dr. A. H. MacKay, Superintendent of Education, for 1899, gave the following particulars: The number of schools increased from 2,385 to 2,390. The sections without schools were 146, against 124 last year, which was the best on record. The increase of sections without school was confined mainly to

the counties of Inverness and Cape Breton, and was due, probably, to the cessation of the granting of "permissive" licenses. That this most desirable change had been effected without any more serious consequences was very satisfactory, especially when it is known that in 1897 and 1898 the sections without schools were respectively 153 and 171, although "permissive" licenses were then being granted. To the same cause the decrease in the annual enrollment from 101,203 to 100,617 may be due. The number of teachers employed in these 2,390 schools diminished from 2,510 to 2,494, compared with the previous year, which means that the schools were improving with respect to the number of changes in the teaching staff made within the school year. The amount of money raised by assessment on the school sections was less than in the previous year by about \$25,000. More than \$16,000 less was required for building and repairs. This economy did not affect injuriously the salaries of the teachers, for which more than \$15,000 more was voted than last year.

The statistics of the public schools for the term ending July 31, 1899, show 2,390 schools, 100,617 pupils, and an average attendance of 55,919. In the county academies there were 1,795 pupils and 53 teachers. The total expenditure included \$246,462 from the Government, \$120,082 from the municipalities, and \$447,906 from other sources—a total of \$814,450.

Revision of the Statutes.—This most important matter had been for some years in the hands of a joint committee of the Legislative Council and House of Assembly, composed of Messrs. J. W. Longley, W. T. Pipes, E. M. MacDonald, W. H. Owen, W. B. Wallace, J. N. Armstrong, J. H. Sinclair, C. S. Wilcox, D. Finlayson, and H. H. Wickwire. It reported in the session of 1900, and advised slight changes in the work of the preceding royal commission.

Railways.—During the year work was advanced upon important local lines, notably the Midland Railway, the Coast Line, the Inverness and Richmond Railway, and the Nova Scotia Southern Railway. The passengers on the provincial railways during 1899 numbered 103,861; the value of the freight carried was \$338,406, and of the mails and sundries \$90,257. The chief railway event, however, was the letting of the contract for, and partial construction of, the Inverness and Richmond Railway, connecting the coal mines of the mainland with the great steel interests of Cape Breton Island. The contract provided for the construction and equipment of 60 miles of railway from a junction with the Intercolonial Railway at Port Hawkesbury to Broad Cove, and to put them into operation on or before June 15, 1901, open and *bona fide* work a coal mine or coal mines at Broad Cove, and equip the same with approved plant and machinery sufficient for the production of 250,000 tons of coal per annum, time to be material and the essence of the contract. The contract was executed on May 23, 1899; location surveys were made, submitted, and approved, and actual construction began in June following. The progress was very satisfactory.

Mines and Minerals.—The production of gold in Nova Scotia during the year ending Sept. 30, 1899, was 27,772 ounces; of coal, 2,642,333 tons; of coke, 55,484 tons; of gypsum, 140,000 tons; of grindstones, 50,000 tons. The chief increase was in coal—360,929 tons more than in 1898. The central subject of congratulation was the very great impetus given to mining and industrial development in Cape Breton in 1899 and 1900. It arose out of the formation of the Dominion Coal Company in 1893 by Mr. H. M. Whitney, of Boston,

and the obtaining by him of a ninety-nine-year lease of most of the mines in the Sydney (Cape Breton) coal field. In March, 1899, Mr. Whitney organized the Dominion Iron and Steel Company, with large capital and special privileges granted by the provincial and Dominion governments. With every facility for shipping and easy access to raw materials and available markets, with immense mineral wealth only awaiting development, with one of the finest harbors in the world at Sydney, these concerns have already expended much money and produced a condition of great prosperity in Cape Breton. The total value of mineral production in the province in 1899 was \$3,517,030.

Fisheries.—The value of the yield in 1898 was \$7,226,035, distributed mainly among cod (\$1,896,614), lobsters (\$2,673,624), and haddock (\$532,648). The bounties paid by the Dominion Government to fishermen in the province amounted to \$103,730; and the number of vessels engaged was 508, with a tonnage of 20,868, and 4,840 men. The smaller boats numbered 7,872, with 12,438 men. A slight decrease on the preceding year was visible in these figures.

In the session of 1900, on March 22, a select committee of the house—composed of Messrs. George Mitchell, J. G. Sperry, M. J. Doucet, C. P. Chisholm, E. M. Farrell, Simon Joyce, H. S. Leblanc, A. M. Gidney, T. Robertson, and Mr. Law—reported upon matters relating to an inquiry into the condition of the fishermen of Nova Scotia, as follows:

"That they have held several meetings, and have carefully considered the subject of providing cold-storage facilities for the preservation of fresh bait for the use of the fishermen, toward which the Federal Government made an appropriation last session of \$25,000 to supplement amounts to be raised by associations of fishermen in various localities for the purpose of building and equipping cold-storage houses.

"That they have been informed that associations have been formed throughout the fishing centers of the province as well as in Prince Edward Island and the Magdalen Islands, and that a few cold-storage buildings are in course of construction.

"That your committee desire to impress upon the Federal Government their sense of the great importance of the enterprise, conferring, as it will, immense benefits on the fishermen by preserving fresh bait and encouraging the trade in fresh bait, which latter should attain to much greater proportions than it has hitherto done, and they would express the hope that the Government will continue to deal with it in the most liberal manner possible."

Agriculture.—This industry never has been extensive in Nova Scotia, but latterly, as ship-building declined in importance, it has come more to the front. These subjects were debated in the Legislature, and on March 28, 1900, the Hon. T. R. Black presented a report from the Committee on Agriculture from which a few extracts may be taken as descriptive of the general situation:

"The agricultural industry of the province is assuming a much more encouraging aspect from year to year. We find our farmers generally displaying a much more intelligent and hopeful interest in their calling than in former times. There is a feeling abroad that farming pays when the industry is conducted with intelligence and spirit, and there can be no doubt that vast improvements are being made in agricultural methods, with correspondingly beneficial results.

"In view of the large increase in the mining

and manufacturing industries of the province, giving employment to many thousands of people engaged in these pursuits, and thus creating an active and steady home market and good prices for the products of the farm, our farmers have much to stimulate and encourage them in their work. Your committee are of the opinion that the annual provincial exhibitions at Halifax have had a marked effect in the improvement of the live stock of the province.

"Your committee beg to commend the action of the Government and congratulate the country upon the very liberal grant submitted in the estimates for the importation of standard-breed stock.

"Among the factors which have brought about the present hopeful agricultural outlook in the province must be noticed the Nova Scotia Farmers' Association. This fine organization by its annual meetings is the means of diffusing a vast amount of information of the utmost value to the tillers of the soil. The Fruit Growers' Association is a kindred organization, whose services to the horticultural interests of the province can not be overestimated."

Fruit Growing.—The province is famous for its apples, and Annapolis valley is the center of one of the finest fruit-growing regions in the world. Late in January, 1900, and in connection with the general position of this industry, President J. W. Bigelow, of the Nova Scotia Fruit Growers' Association, said, in his annual address:

"The past two years have been most profitable to the Nova Scotia fruit grower from the fact that we have had fair crops of superior apples and obtained the highest prices in the history of the trade, owing to a scarcity in the world's apple crop. This year our apple crop will exceed 400,000 barrels, and as most of these have been sold at \$2 to \$3 a barrel, the net proceeds may be fairly estimated at over \$1,000,000. Some estimate may be formed of the immense profit of this business this year from the fact that several growers have accepted or refused from \$3,000 to \$5,000 for this year's crop of apples, and many orchards have paid this year 25 per cent. on a valuation of \$1,000 an acre. This is owing to the fact that Nova Scotia was the only apple-producing country that had 90 per cent. of an average crop. Our plum crop has this year yielded about 60,000 baskets (10 pounds), with average sales of 30 cents a basket. Our cranberry crop reached over 1,000 barrels. Pears and small fruit were a fair crop, and sold at remunerative prices. Strawberries, about 300,000 baskets. Our fruit trees this year have been unusually free from insect pests and fungous diseases, and the dreaded San José scale is so far not known to exist in Nova Scotia."

NURSES, TRAINED. The need for trained nurses appears to have agitated many countries at about the same time, and everywhere the movement to provide them grew out of a desire to improve upon and organize under more definite training the work attempted for ages by sisters of professed religious orders in the hospitals and on the battlefields of Europe. If England appears to get most credit for pushing the system, it is because England more than any other country stood in need of it, having had no generally recognized sisterhoods until of late years.

To Kaiserswerth, a little village on the Rhine, is traced the germ of the nursing system which now prevails throughout America, the British Islands and their dependencies. The Deaconesses' Institute, at Kaiserswerth, was founded by Pastor Fliedner and his wife in 1836. It grew out of an asylum school and penitentiary beside a hospital, but from the skill of its founders its sys-

tem was soon heard from, and it still enjoys a world-wide fame. To this institute went Florence Nightingale for training in 1851. The following year she undertook the task of superintendent for invalid ladies in Harley Street, London, and soon afterward published her *Notes on Hospitals*, which attracted wide attention and aroused interest in Government circles. In 1854 the Crimean War broke out, and Miss Nightingale and her staff of trained nurses went to the front, and her fame soon spread over the world.

But before that several efforts had been made by private individuals to train nurses in England. In 1840 Mrs. Fry and Lady Inglis founded the first nursing institute in London, under the patronage of Queen Adelaide and at the suggestion of Dr. Gough and Robert Southey. This institution still exists in Devonshire Square. Up to this period nurses had had the reputation of being the most unreliable class of working women known. An English physician of this period wrote: "We always engage them without a character, as no respectable person would undertake so disagreeable an office." Burdett, in his *History of Hospitals and Nursing*, says: "Every vice was rampant among them, and their aid to the dying was to remove pillows and bedclothes, and so hasten the end."

In 1847 Sir Edward Parry sent out a call for nurses for the Harbor Naval Hospital, London. They were to be trained without expense to themselves at Dalston, and finished, if possible, at the institute at Kaiserswerth. Not one volunteer responded to this appeal. Florence Nightingale had not yet become a heroine and made nursing fashionable. Next the Bishop of London founded a collegiate institute for the training of nurses, but the training proved inadequate. Mrs. Sellers also founded, the same year, the first Anglican sisterhood of the Holy Trinity, at Davenport, whose inmates had to undergo two years' training as nurses, and this school grew. It still required the name of religion and consecrated devotion to make nursing respectable in the popular mind. Several other nurses' schools followed this, among them that of St. John the Baptist and St. Margaret's.

In 1856 the sum of £40,000 was subscribed for Miss Nightingale by a grateful public, and she at once expressed her desire to found with this a training school for nurses. In 1860 the Nightingale Fund School was opened in connection with St. Thomas's Hospital, London, and it has long enjoyed the reputation of being the best in the world. At most hospitals the longest term for training nurses is two years; at St. Thomas's it is three years. It was really founded for gentlewomen to qualify for head places in hospitals or for district nursing under an organized system. The rule in nearly all training schools is, that the services rendered by the probationer or pupil pays for the tuition, besides which the hospital makes a small periodical allowance for the expenses of costumes, text-books, etc. At St. Thomas's the pupil pays £30 for tuition, and must agree to take service for two years after leaving the school. There are occasional vacancies for the accommodation of those who can not afford to pay. The home adjoins the hospital quarters, and one of the terms of training is that the nurses need not leave Great Britain unless at their own request. St. Thomas's, however, has sent abroad some famous nurses who wished to go.

Schools for training have since multiplied in London, and no great hospital, public or private, is without one. There are good training schools in other English cities, and also in Scotland and Ireland. That of the Royal Infirmary, at

Edinburgh, has a world-wide reputation, and so has the Adelaide Hospital, Dublin. Cork, also, has excellent training schools. Indeed, Ireland was better off for nurses than England in former days, for she always kept the Sisters of Mercy, and some of these in late years have come under modern training. All over the United Kingdom district nursing of the sick poor is now carried on under certain associations and supported by voluntary contributions; most villages even have their parish nurse, and in England these are under the auspices of the Queen Victoria Jubilee Institute for nurses.

As to rules, the schools are about the same as those in America, which were modeled after them. The supreme authority is usually centered in a matron or superintendent, who herself must have gone through all the curriculum of trained nursing. In large London hospitals, under her are assistant matrons, or head nurses, and "home sisters," who attend to affairs in the house in which they live. Over each ward of 20 to 30 beds is a sister, who is directly responsible to the household and visiting physicians for all the patients of her ward; under this woman is generally a responsible staff nurse to every 10 or 15 beds, and under her as many pupil nurses as the necessities of the ward demand. The routine order is, if the inferior nurse notes any change in the sick she must report to the nurse above her, the latter to the head nurse, the head nurse to the house doctor, the latter in turn to his superior, the visiting surgeon. Much red tape is connected with trained nursing. There are also rules innumerable about provisions, storeroom supplies, medical supplies, bedding, cleanliness of wards, closets, kitchens, etc., for all of which the superintendent must be responsible to the house committee.

Nursing in America, although it has not undergone the vicissitudes that attended it in Europe—especially on the Continent—has yet had a somewhat checkered history. In early days the best nursing here, as elsewhere, was done by Sisters of Charity, who did the best they could both in hospital and district nursing in such cities and towns as would let them in. They had little or no chance in New England, and hardly any in New York; and to allay the Puritan spirit of opposition against them in Philadelphia the Society of Friends founded a nursing school in 1838. It does not appear, however, that the nursing was carried out on more scientific plans than that done by the sisters. It is said that as early as 1770 Dr. Seaman used to lecture to a class of 24 nurses in New York city in what was then the nucleus of the present Bellevue Hospital. But the practice appears to have died with him. It was through the exertions of a committee of ladies of the State Charities Aid Association that permission was obtained of the medical board to start the Bellevue School. They secured a house opposite the hospital, on East Twenty-sixth Street, as a home for nurses, and, receiving assurance that the necessary changes would be completed on May 1, 1873, they agreed to begin work in the wards on that date. It was not easy to secure a competent superintendent, but at last they induced Miss Helen Bowden, of the University College Hospital of London, to fill the post. This lady was known in England as Sister Helen. She possessed a thorough training and wide experience in all matters pertaining to hospital nursing, and had also a reputation for energy and executive ability. She had for assistant one as energetic as herself—Miss Van Rensselaer, of New York. Together they guided the infant school during its first and most trying years. To quote from the records: "The standard of qualifi-

cations was placed high, and, although there was not the large number of applicants for admission looked for by the managers, the standard was not lowered. Only 4 appeared for the place of head nurse, and Sister Helen accepted 3 of them. Only 29 sought admission to the school in the first seven months, and 10 of these were rejected. The Board of Managers, of which Mrs. William H. Osborne was chairman and Mrs. A. P. Woodward secretary, received in this year donations to the school from many citizens of New York to the amount of more than \$22,000, and many of the necessities for furnishing the house besides."

To quote again from the records, those employed before the opening of the school were to the "last degree incompetent. They were ignorant, indifferent, dishonest. They were eye servants. Sairy Gamp and her 'pardner,' Mrs. Prig, were ubiquitous. They 'drank fair' and only attended to their patients when 'so disposed.' Nurses and general helpers about the hospital were heirlooms from primitive times. . . . Most of them had just served enforced time at the island, and worked without pay for the sake of the board and lodging and the dishonest perquisites they obtained."

In the second year 4 more wards were placed in charge of Sister Helen, making 9 in all—3 female medical and 3 male medical and 3 female surgical wards. Already trained nursing was growing in popular favor. There were this year 118 applicants, of whom but 29 were accepted, and only 20 of these were kept longer than the probation month. The first class, graduated in 1875, included 6 nurses. The best one of these went to superintend the training school then established at Boston.

This same year another training school was established on Blackwell's Island, and it is still in vigorous life, having completed its twenty-fifth year, with about 60 regular nurses, who have a connection with the City, Maternity, Gouverneur, Fordham, and Harlem Hospitals. The City Hospital male training school is also on Blackwell's Island.

The aim of the mother school at Bellevue will explain the aim of all the others that followed it, viz., first, to improve the condition of the hospital sick; second, to utilize the hospital as a clinical school for instruction in the art of nursing the sick among rich and poor alike. These objects have been achieved. All authorities now admit that neither the practice of antisepsis nor the application of modern sanitary law could be made practical without the co-operation of intelligent nurses. The fact that in 1893 there were 1,860 applications for entrance into the training school at Bellevue will suffice to show how nursing has grown in favor among women. Out of these, 39 were accepted on probation. The probationary period covers one month. If found acceptable at the end of that time, the applicant enters as pupil and pledges herself to remain two years. The standard number of nurses at Bellevue is 64. The best of the class each year, after passing through examination, are selected for the place of head nurse, one of the responsibilities of which is the training of pupil nurses. The training covers the care of men, women, and children in medical, surgical, gynecological, and obstetrical cases, through all the vast range of diseases admitted to Bellevue. The curriculum includes, besides instruction by the medical and surgical staff, didactic teaching by a corps of lecturers and by the assistant superintendent in anatomy, physiology, materia medica, and practical nursing. There are also lessons in cooking by the cooking school. Special training is given in care of the insane.

An outline of the training at Bellevue applies also to that of other institutions, most of which have been organized under its direction. Even the matron of the Lying-in Hospital in London, England, is an alumna of Bellevue, and was selected from many applicants. Several heads of training schools in Canada are from Bellevue. Some have gone to China, Turkey, and Japan. The St. Paul Hospital Training School, at Rome, Italy, founded for the purpose of meeting the needs of American and English travelers, was put under the charge of a Bellevue graduate. In the early days, nurses from Canada and elsewhere outside the United States were taken to be trained, but in later years this has been stopped; since but a limited number can be accepted, the privilege is confined to Americans. Nurses are still supplied to other countries, but pupils are not accepted from them.

On Christmas, 1887, Mr. D. O. Mills presented a sum of money for the founding of a school for male trained nurses. This was completed in 1888, and placed under the supervision of the female training school, Mrs. E. S. Willard, of the class of 1887, being placed in full control. From this place male nurses are supplied.

The mother of the training school, Sister Helen, did not remain with it long, though long enough to see it on a good working basis. Failing health forced her to return to England in 1876. Miss Van Rensselaer was also obliged to leave. They were succeeded by Miss E. P. Perkins, under whose care the school remained twelve years. When, in 1888, she also retired, she was succeeded by her assistant for four years, Miss Agnes S. Brennan, who still fills the post of superintendent, the third in its twenty-eight years of existence. Since the rapid multiplication of training schools here and in Europe the drain from Bellevue has naturally grown less. The Spanish-American War again gave a new impetus to the demand from military and naval hospitals. Five or six Bellevue graduate nurses are at work in Manila, and several from other training schools also, and a new field has been opened in Porto Rico and Cuba. Miss O'Donnell, of New York, has established the first training school in Cuba in the Government hospital of Our Lady of Mercies, Havana. Her pupils are Spanish nuns and some Cuban young women. Another New York nurse has gone out to Africa in charge of nurses attached to a Canadian regiment, and still another in charge of those on the hospital ship Maine. During the past year 13 graduates of Bellevue have married. The calls for private nursing during the same year were 698; while there were 30 applications for superintendents or head nurses in hospitals, only 16 of which the school could fill. Forty-five entered for the class of 1900; 13 left after the month of probation and 5 were dropped during the year, leaving only 27 to graduate. These figures indicate that not all women who feel the ambition to become nurses are qualified by nature to do so. A dishonest certificate of health is sure to reveal itself. One of the axioms of a hospital training school is, that no one with a tendency to "consumption, rheumatism, nervousness, or flat foot" should attempt to enter. The desirable age is between twenty-three and thirty-three. Besides the regular two years' training course, many who wish to keep in touch with advanced surgery and medicine take a post-graduate course of another year.

Several hospitals whose training schools have come into existence within the past ten years make their regular course three years. This is the rule with certain hospitals in England, Germany, and other countries of Europe, and with some of

those in Boston, Philadelphia, and other cities. This is the rule with St. Luke's and the Presbyterian, in New York. A model of the wards in the Presbyterian Hospital was sent to the recent exposition at Paris, and received a prize. Fine training schools are attached to both these hospitals, which supply nurses to private patients. In hospitals comparatively private like these the nurses have access to other hospitals also for special study, such as the Maternity, the Foundling—in charge of a trained sisterhood—the scarlet fever, and the diphtheria hospitals. Yet there is no lack of opportunity for study within such an institution itself. In 1900, 3,322 patients were admitted to beds in the wards of the Presbyterian Hospital, 4,349 were treated in the emergency ward, 17,207 were admitted to the dispensary, and the ambulance answered 2,446 calls. The record of other semiprivate hospitals in Boston, Philadelphia, Chicago, San Francisco, and all large American cities could equal these.

In all hospitals nurses, after their month of probation, if admitted, wear the hospital uniform—cotton gown, white cap and apron. In addition to board and lodging and laundry—24 pieces a week—each nurse receives \$10 a month for dress and expenses incident to her studies, the education received being an equivalent for her services. The hours of duty are, as a rule, from 7 A.M. to 7.30 P.M. for day nurses, and for the night staff from 7.30 P.M. to 7 A.M. From an hour to two hours daily are given for rest, one afternoon each week is granted, and either half the day Sunday or every second Sunday. These hours, however, are liable to vary with the requirements of work, and nurses may be called for day or night duty in the care of private patients. From two to three weeks' vacation is allowed each year.

Homœopathic hospitals in all large cities have now their own corps of nurses and training schools. This is no more than a matter of *esprit de corps*, for the training is practically the same in old as new schools of medicine. The homœopathic hospital on Blackwell's Island is worthy of special mention, because, although a charity hospital, it is one of the most attractive in appearance in the land. Many dainty devices are resorted to in order to do away with the regulation hospital air and give it a look of home. Its utilitarian appointments also are noticeably good. Woman nurses attend to the men as well as to the women. Its training school is flourishing, and its superintendent, Miss Mahoney, is a skilled pharmacist as well as a trained nurse.

The really systematic nursing of paupers began in 1884, when the State Charities Aid Association laid down rules that no feeble, disabled, or intemperate person should be allowed to attend on the sick, and that one good paid nurse, at least, should be in every poorhouse. Most other cities have similar rules. Although every State and every city of any size has now its training school, the most numerous and notable of these, after New York, are perhaps in Boston, Philadelphia, Chicago, and St. Louis, and a very fine training school is attached to the State general hospital at Portland, Me. Several hospitals continue to prefer that their nurses belong to sisterhoods. St. Luke's, New York, for instance, had from its foundation, in 1850, some trained sisters, but lay pupils are now admitted to its training school. A similar order of Protestant sisters is in Syracuse, who also do parish and district work. The order of St. Margaret—a branch from the English—in Boston, are noted nurses, and a high price is paid by private patients to enter their hospital.

In England the training schools are largely un-

der Government patronage, and also receive no little yearly income from a system that might be called a subletting of their nurses to private patients and other institutions. In America the nurses are entirely detached from the training institutions and receive direct from their patients the money they earn, which ranges from \$20 to \$30 a week. It was soon felt, however, that something to take the place of the nursing institution in England was needed in America, and the nurses' registry or directory was instituted, first in Boston in 1879, next at Philadelphia, and now all cities, even those of Canada, have a similar system. It requires a statement to be left with the registry of name, age, address, qualifications, kinds of nursing, rates of charge, and both family and medical references. If eligible, the nurse is registered and pays a fee of \$5. The person needing the nurse pays \$1 on application. Detailed inquiries from both families and doctors are kept, and thus the nurse's character and skill are followed throughout.

To correspond also with the system of district nursing throughout England, "nurses' settlements" have of late years been established in American cities. They are generally located in the most densely populated districts, and among the poor, and do a work in their line similar to that done by the college settlements in another.

The nursing throughout Canada is still most largely in the hands of the Sisters of Charity, but in the English-speaking cities the American system has prevailed since 1881, when a band of 16 nurses with superintendent went from Bellevue Training School to Toronto. Others have branched off from these to Montreal, Ottawa, and other places. Nursing in Australia is also mainly in the hands of Sisters of Charity, but a band of trained women under charge of some ladies from Edinburgh have founded a fine training school in Melbourne. Prince Alfred Hospital, at Sydney, is also a noted training center. There is another training institution at Adelaide, and one at Launceston, Tasmania.

Training schools almost if not quite equal to those of England have also gained a footing in India. Lady Canning founded a notable system at Bombay, under the charge of the Protestant Sisters of St. John Baptist. The institution at Oodypore, known as the Lady Dufferin Fund, founded while Lord Dufferin ruled India, is a training school and association for supplying medical aid to women. In 1886 a training school was attached to the hospital at Poona for training native women of all castes for nurses. In 1888 the first detachment of Indian sisters went to Rawalpindi and Bangalore to nurse some of the troops that were suffering with enteric fever. Malta, Goya, South Africa, and other places where once only ayahs or Kaffir boys could be had for nurses are now becoming acquainted with the modern system of nursing the sick.

Of all countries in the world, the history of nursing is perhaps most interesting in France. It has had for the purpose the oldest and most noted institutions. In no country was so much benevolence toward the sick shown in times before enthusiasm had learned to link itself with science. As early as the eleventh century a nursing sisterhood, the Hospitaliers Hôtel Dieu, were famous, and they extended their work into other countries. The order of Fille de Marthe was established in 1443. About the middle of the sixteenth century the Prince of Sedan founded the Ddemoiselles de Charité, a regularly organized sisterhood, but exempt from vows, to work among rich and poor alike. In the seventeenth century Frances de

Bloiset founded the Fille Ste. Geneviève, especially for sick nursing. In 1630 the Hospitaliers de Loche were introduced into 13 hospitals. There were numerous others; even an inspired shepherdess founded a nursing order. But the most famous and lasting of all, and that which corresponded most nearly to the modern work of deaconesses or sisters of Germany and England, was founded in 1633, the great order of Vincent de Paul, which still dominates most of the nursing world. The women of this order, unlike others, were not bound to perpetual vows. They were free to renew them or leave the order each year, though the freedom was scarcely ever taken advantage of. The words of its founder have often been quoted: "Your convent must be the hospital; your cell, the ward; your chapel, the parish church; your cloister, the streets of the city; your girdle, the fear of God; your veil, holy modesty." This order soon pervaded the world. It suffered persecutions during changes of government, and it was often suppressed during revolutions. It was insulted in many ways. The doctors often complained that it gave too much attention to the patients' souls to the neglect of minute instructions with regard to the body. But men on battlefields always glorified these women, who knew no fear, and penetrated the thickest of the fray, heedless of their lives.

The doctors of France wanted women wholly in their own service, and they finally got them. The sisters were suppressed, and in 1877 the Municipal Council of Paris appointed Dr. Brownell director of a school for training nurses, male and female. The theoretic course included hospital administration, anatomy, minor surgery, physiology, dressings, hygiene, pharmacy, and monthly nursing. Lectures were held twice a week in the evenings, practical lessons were given daily, and diplomas were awarded to successful pupils at the end of each year. Many experiments had to be tried in rudimentary education before nurses were found who were fit to receive these instructions. At first it was difficult to find women at all, and when they came they were mostly domestic servants out of place, dismissed shopgirls, and the like. They were paid from 15 to 20 francs a week, with food, lodging, and uniform, yet they proved most unsatisfactory.

They evaded rules, they demanded tips from patients, they drank the patients' wine, and even the harder spirits in which the doctors preserved specimens. The same trouble was found in England and America.

The replacing of nuns by trained nurses took place in hospitals in about the following order: Salpêtrière and Bicêtre, 1877; Laennec, 1878; La Pitié, 1880; La Rochefoucauld, Des Ménages, and St. Antoine, 1881; Lourine and Tenon, 1882; the Incurables and Cochin, 1885; the Necker, Enfants Assistés, and Enfants Malades, 1886; the Trousseau, Lariboisière, and Beaujon, 1887; and La Charité, 1888. Despite all this, the decree that banished the sisters from Parisian hospitals was repealed in 1880, and they were free to return and undertake nursing wheresoever their services were wanted. A sister in full religious dress is again at the head of some of the hospitals, while under her are many lay trained nurses. The latter have become improved as a class by the instruction received from the Assistance Publique, which included a first course in general education, reading, and arithmetic, to be supplemented by practical instruction in the art of nursing, and a third course of rotation or serving in every department of the hospital. The hospitals of Paris and all the European Continent have only of late taken

up the system of rigorous cleanliness known to those of America and England. In Paris and other French cities, too, many institutions have in late years been established which are in no wise religious, and where trained nurses can be obtained by private patients. There are also two noted societies for supplying nurses and delicacies to wounded soldiers in time of war; these are *Les Dames de France*, of which the widow of the late Marshal MacMahon is president, and *Les Femmes de France*, whose president is Madame Koehlin Schwartz. There are also Red Cross nurses.

Spain is still in the hands of nuns and Sisters of Charity nurses, who since the suppression of their orders (1835), and confiscations of their property later by Isabella II, are too crippled in resources to take any initiative themselves, and the Government does nothing. Only those who can pay for it receive good nursing. It has been said that no reforms in the interest of the sick poor have taken place in Spain since St. Theresa worked wonders there in the middle of the sixteenth century. Interested persons some years ago settled an English nurse in a cottage hospital at Cadiz for the use of English people and others taken sick there. It still flourishes. Portugal is no better off, and for a similar cause, and in either country kindness is said to be more common than trained nursing. The nuns and monks do what they can, but are reduced to want themselves.

Down almost into modern days Germany held to the traditions of nursing founded by the great orders of chivalry, by the Knights of St. John and of Malta, and Sisters of Charity as hospital nurses became the rule there as in France. The Lutheran parson Fliedner, at Kaiserswerth, already mentioned, made the first break, and he, in choosing a name for his modern nurses, went back to that used by Christians before convents were founded—he called them deaconesses. Their fame spread; they were called to hospitals in Berlin, Frankfurt, Kreuznach, London, France, even to Constantinople, India, and Japan. Up to 1883 it was estimated that 627 nurses had been trained at Kaiserswerth, and they were placed at about 200 stations. Since training has multiplied at all home stations, the draw from Kaiserswerth is less. Indeed, since the fame of his pupil, Miss Nightingale, filled the world that of Pastor Fliedner has been rather obscured.

Empress Friedrich, daughter of Queen Victoria, founded a noted training place, the Victoria Home and Fatherland Ladies' Society, at Magdeburg. Empress Augusta founded another at Schönebeck. Others sprang up at Dresden, Leipsic, Breslau, Carlsruhe, and elsewhere in the kingdom. The Red Cross has there, as elsewhere, done an immense work in training. Besides, many of the long-established brotherhoods and sisterhoods of the Roman Catholic Church began also to train. There are said to be more than 6,000 nurses in Prussia alone.

Yet throughout Germany in general, even in Prussia, the Catholic societies, having longest concerned themselves with nursing, are still mostly in possession of the field. They are almost wholly so in Austria and outlying German provinces; and as Government does little or nothing to perfect the system, old methods prevail. Vienna, one of the world's foremost cities in surgery, is accounted one of the most backward in nursing. The Rudolphnerhaus is reputed one of its best served hospitals, having 18 or 20 Red Cross sisters, assisted by 6 probationers. Red Cross sisters in these countries are drawn from all ranks in life, but an effort is made to secure the most intelligent and

refined. They pass through the regular probationary period and curriculum as other nurses. As a rule, they receive the first year board and lodging, and what would correspond to about \$3 or \$4 a month; the second year about \$10; and the fourth year about \$14. Pay for nurses on the Continent varies too much to be specified accurately, but everywhere it is small compared with what they receive in England and the United States. A strong reason, no doubt, for holding to the old order of nursing is that men or women of religious orders, being supported by their orders, work gratis and from a sense of duty only.

The Rudolph Stiftung, in Vienna, was found, when examined a short time ago, to have 70 Sisters of the Sacred Heart in charge of the wards, answerable less to the doctors than to the head of their order. The Allgemeines Krankenhaus, with 2,000 beds, had only 250 nurses, without a matron or any system of training; they were not sisters of any sort, but women rather of the "Sairy Gamp" order, in common stuff gowns and blouses, with no caps or aprons.

The hospitals at Buda-Pesth are served by Brothers of Mercy, who also carry on a varied and complex system of district nursing without regard to creed. They are said to have had no scientific training, but plenty of experience, and to be devoted and reliable. These examples may serve to indicate the nursing system throughout Austria and adjacent German provinces.

Belgium is also in the hands of the religious nursing orders, but better managed. There is more training, and the modern system is growing.

Holland, which never had much to do with religious orders, has not, up to a recent period, had any established system of nursing its sick, and seemed somewhat indifferent to adopting any. The enterprise was first attempted about thirty-five years ago by three ladies, one of whom gave a house of hers at The Hague to the experiment. The venture met with unexpected success: the demand for private nurses soon overran the supply, and larger facilities for training were established. As early as 1888 there were 337 people in the Home of the Deaconesses. Next, the Children's Hospital, at Rotterdam, established a training school. Although Holland still needs concentration of force and purpose in her training, she bids fair to catch up with some of her neighbors.

Sweden, Norway, and Denmark all have adopted the modern system of trained nursing. It is not unlike that of England or America, except that it is on a smaller and more primitive plan, and nominally more to meet the exigencies of war. The best training schools are under the auspices of the Red Cross sisterhood. The Kommune Hospital, in Denmark, has a training school of note. The chief nurse—*plejemoder*—has to live in the hospital and oversee all the sick nursing. The nurses assist the surgeons and prepare all the work for their hands—antiseptic dressings, sublimate, iodoform, gauze, etc. There are two classes of nurses. One is taken only from the upper or educated classes, and called *damer* or ladies; the others only attend to patients under direction of these. The former are trained, not to serve, but to head institutions.

For Sweden and Norway the Diakomiss Institute at Stockholm is in high repute as a place of training. At first all the nurses in hospitals throughout these countries used to be on an equal footing; of late all have head nurses and a superintendent. A system was also established at Copenhagen, and followed elsewhere, by which the Red Cross sisterhood could instruct the people who came to them for useful information in time of sickness.

Every country is now endeavoring to adapt its nursing system to the conditions of its people.

Russia has been trying to adapt methods to fit her needs ever since the Crimean War, where she had her eyes opened to the value of nursing. The nurses of all her military hospitals, and most of those of the large cities and towns, are obtained from the Red Cross training schools. The society is paid for the nurses it furnishes, and then pays the nurses a nominal sum, varying, but always small. The Red Cross differs in different countries, adapting its rules to its environment. In Russia it is semireligious, but its members can leave if they please. Some hospitals have a very small force, no more than 6, with gratuitous helpers under them. The Military Clinical Hospital, in St. Petersburg, has a nursing force of 67 men, with 15 superintendent sisters over them. Okoncon Hospital has 100 nurses and 25 Red Cross sisters. Children's hospitals all have woman nurses. In time of war Russia has a sisterhood unlike that of any other country. Women of the very highest social class train for the purpose, and in need volunteer, enlisting for the whole war without pay. When war is over they vanish as if they had never been. The tendency is to replace all male nurses by female. Even voluntary male nurses have not only been found wanting in capacity, but also in perseverance and honesty.

Italy, which in early times boasted one of the world's most famous institutions, along with many others, the Nursing Order of the Holy Ghost, founded by Pope Innocent III, has found herself within recent years without any nurses at all. After united Italy's suppression and confiscation of convents and monasteries, when even the irrepressible Sisters of Charity had to fly, there were none to fill their place in all Italy, for 2,256 religious bodies had been suppressed. After a while, as the clamor of the people for their aid became known, the Sisters of Charity began to creep back again, and although the law was still in force, the Government may be said to have winked at their coming. Many of these women have since qualified as nurses, and are now doing good work in Italy. To escape the law they suppress their religious name, and are known simply as superintendents. The large hospital of Maggiore, in Milan, furnishes an example of how they work. Each ward of 50 or 60 beds has a superintendent sister, and under her are 4 lay sisters. Yet with this small force their hospital is reported to be very well kept. All helpers in the hospital are under their superintendence. Almost anywhere in Italy can now be found nurses trained on the English or American plan. They can be procured from the training institution at San Remo, presided over by a Bellevue nurse.

Everybody has heard about the rise of the Red Cross Society, which had its inception in the brain of a Swiss gentleman, M. Henri Dunant, who while riding leisurely in his carriage was attracted by the thundering of the guns at the battle of Solferino, obtained admission to the field, and there witnessed suffering so horrible and needless that it inspired him to write his book, *Souvenir de Solferino*, which created a sensation, and was translated into most of the languages of Europe. At the next yearly conference of the Society of Public Utility, held in Geneva in October, 1863, he presented his idea to the great war-making powers of providing a way by which civilians could reach and care for wounded men from the outside. Next year delegates from every Government in the world came to discuss the proposition of M. Dunant, and after due season the treaty of the Red Cross was entered into.

Meanwhile, the United States was passing through her great civil war. She had no trained nurses, but her Sanitary Commission arose spontaneously, and did a work that astonished the world, and then dropped out of sight. Miss Clara Barton has told the world of her endeavors to get the Red Cross treaty's invitation to the United States to join it noticed, and Secretary Seward's persistent ignoring of the matter, on the ground, as it afterward appeared, that the United States, being at peace with the nations, did not need to join the treaty. Nor, despite all that individual Americans could do, and although 32 nations were in the treaty, could any response from our Government be obtained until Miss Barton laid the whole matter before Secretary Blaine, and he in turn placed it before President Arthur, who promptly signed the treaty. The United States is the only country that this treaty permits to extend its ministrations into other fields than those of war. This is also the only country where the Red Cross Society takes for its uses nurses already trained, and trained none of its own until the past year, when a Red Cross training school was founded in New York.

An account of nursing seems hardly complete without mentioning two women, both of them of France, both equally heroic, and representing respectively the older and newer orders of nursing.

Mme. Coralie Cohen, widow of a physician, was first heard of after the breaking out of the Franco-German War. She was one of the first trained nurses to respond, and throughout the campaign proved herself a marvel of devotion and courage, going through the German ranks and nursing their wounded as carefully as she nursed the men of her own beloved France. Yet she found opportunity to proclaim her patriotism. She had established an ambulance at Vendôme after the capitulation of Metz, and was nursing 800 wounded, when German officers hoisted their flag over the ambulance. She at once refused to work except under her own flag, and announced that if the German flag was not removed she and her staff would depart. The Germans, admiring her pluck and determination, replaced the French flag. The war over, she traveled into Germany, seeking out her countrymen in hospitals and prisons there. The Empress Augusta so admired her philanthropy and courage that she presented Mme. Cohen with the Red Cross of the German order, and in 1889 the French Government presented her with the ribbon of the Legion of Honor.

In the autumn of the same year a Sister of Charity was also presented with the Cross of the Legion of Honor, and in presenting it the general in command made this speech: "Sister Maria Theresa, you were only twenty years of age when you first gave your services to the wounded at Balaklava, and you were wounded in the execution of your duty. You were again wounded at Magenta. You bravely nursed the wounded through all our wars in Syria, China, and Mexico. You were carried off the field at Wörth, and before you recovered from your injuries you were again performing your duties. When a grenade fell into your ambulance, you without hesitation took it in your hands and carried it a hundred yards from the ambulance, where it exploded, wounding you severely. No soldier ever performed his duty more heroically than you have done, or lived more successfully for his comrades or his country. I have the honor to present you, in the name of France and of the French army, with the cross which is only conferred upon those who have shown remarkable bravery in action. Soldiers, present arms!"



OBITUARIES, AMERICAN. Alden, Alonzo, soldier, born in Wadham's Mills, N. Y., July 18, 1834; died in Troy, N. Y., Jan. 16, 1900. He was a lineal descendant of the Puritan John Alden. He received his early education at Keeseville Academy and Sand Lake Collegiate Institute. He was graduated at Williams College in 1859, and two years later was admitted to the New York bar. He enlisted as a private in the 30th New York Volunteers, and on May 14, 1861, was commissioned second lieutenant. In the spring and summer of 1862 his regiment participated in the first occupation of Falmouth and Fredericksburg. In 1862 Lieut. Alden was invalided home. During his convalescence the 169th New York Regiment was formed in Troy, and he was commissioned major in that regiment, and saw with it the greater part of his military service. He was in engagements at Edenton Road and Suffolk, Va., and at the siege of Charleston. Feb. 13, 1864, he was commissioned lieutenant colonel. He was shot in the head while leading his men in a brilliant charge at Cold Harbor. Returning to his command, he took part in the construction and defense of the Dutch Gap Canal. In June, 1864, he had been commissioned colonel. He won special distinction in the attacks on Fort Fisher, and after the capture of that fort he was placed in command, and on the morning of Jan. 16, 1865, was severely wounded by the explosion. Gen. A. H. Terry, in command of the expedition, made a special report to President Lincoln, recommending his promotion, and he was brevetted brigadier general. He was mustered out of the service July 16, 1865. He was unable to return to the practice of his profession on account of his wounds, from which he suffered till the time of his death. He was for a time in the customhouse in New York city, and from 1866 till 1874 was postmaster of Troy.

Allen, John F., inventor, born in England in 1829; died in New York city, Oct. 4, 1900. He came to this country when twelve years of age, and learned the trade of an engineer, but devoted his life to the invention of engines and mechanical appliances. He invented the Allen high-speed engine, also the Allen valve and the Allen air compressor. When he died he had nearly completed a new engine to be used in a motor vehicle.

Angell, George Ransom, merchant, born in Rochester, N. Y., Nov. 27, 1837; died in Detroit, Mich., April 18, 1900. He received a common-school education, and learned the machinist's trade in his father's shop, afterward becoming a partner. At a time of financial depression he left the business and became a newspaper reporter. Finally, in the early sixties, he entered upon a business career in Detroit, where he spent the remainder of his life. He bought and conducted an extensive art store, was at one time president of the National Photographic Merchants' Board of Trade, was for six years president of the Young Men's Christian Association of Detroit, for two years president of the Board of Education, and at the time of his death was president of the Michigan Bankers' Association, president of the City Savings Bank, and a director in several other financial institutions. He was also active in the affairs of the Congregational Church. Mr. Angell was well read in history and general literature, and was a fluent public speaker.

Archer, Belle (Mrs. Herbert Archer), actress, born in Easton, Pa., in 1870; died in Warren, Pa.,

Sept. 19, 1900. She made her first appearance as a child singer in a juvenile Pinafore company at Ford's Theater, Baltimore, as Josephine, in 1880, under the name of Belle Makensie. Her family name was Mingle. She remained at Ford's Theater several years, and while there married Herbert Archer, a member of the company. She came to New York, where she became a member of the company of the Madison Square Theater in 1886, and played leading rôles in the repertory of that theater with touring companies. She was the leading lady of E. H. Sothern's company in his first starring tour, and also played the leading rôles with Alexander Salvini when he first ventured out as a star in 1892-'93. In 1895 she was engaged at Daly's Theater, New York, and for four years before her death was a member of McKee & Hoyt's company, playing *A Contented Woman*, in which she appeared for the last time on the stage at Niagara Falls, Sept. 14, 1900.

Armstrong, Andrew Campbell, publisher, born in Canada, Aug. 16, 1829; died in Stamford, Conn., Oct. 8, 1900. He was one of the oldest publishers in New York city, and in 1870, with Charles Scribner, Dr. Josiah G. Holland, and Roswell Smith, founded Scribner's Monthly, now the Century Magazine. He was associated with James A. Sparks, publisher of the Churchman, when the firm of Baker & Scribner was organized, in 1846, and he shortly afterward transferred his services to that firm, which upon the death of Charles Scribner, in 1871, was reorganized as Scribner, Armstrong & Co. In 1878 he retired from that firm to become the head of the publishing house of A. C. Armstrong & Son, which still continues in business. Mr. Armstrong was a director of the Bible Society, a member of the Chamber of Commerce, a director of the Merchants' Clerks' Savings Bank, and a director of the Home Insurance Company.

Atwater, Ernest B., missionary of the American Board, born in Oberlin, Ohio, Aug. 20, 1865; Mrs. Elizabeth (Graham) Atwater, born in England; and four children; all killed near Fen-Cho-Fu, Shensi province, China, Aug. 15, 1900. Mr. Atwater was graduated at Oberlin College in 1887, and at the Theological Seminary in 1892.

Averell, William Woods, soldier, born in Cameron, Steuben County, New York, Nov. 5, 1832; died in Bath, N. Y., Feb. 3, 1900. His grandfather was a captain in the Revolutionary army under Gen. Sullivan. He was graduated at West Point in 1855, and after two years at the school for practice at Carlisle, Pa., was sent to the frontier, where he earned a reputation for bravery as an Indian fighter in campaigns against the Crows and Navajoes. In an attack on the latter, in 1859, he was severely wounded, and he remained on sick leave until the outbreak of the civil war. May 14, 1861, he was promoted to a first lieutenancy in the mounted riflemen and put on staff duty with the Army of the Potomac, and he was in the battle of Bull Run and other actions. Aug. 23, 1861, he was appointed colonel of the 3d Pennsylvania Cavalry, and placed in command of the cavalry defenses of Washington. In March, 1863, he made the first of several successful raids, the nature of which is indicated somewhat by one of his dispatches to the department: "Dec. 21—My column has marched, climbed, slid, and swum 340 miles since Dec. 8." Later in the year he made a raid near White Sulphur Springs, and was de-

feated after two days of hard fighting; but on Nov. 5 he made another raid, cleared Green Brier County of Confederates, and captured three guns and a number of prisoners. In the following month he made a descent on southwestern Virginia and cut the Virginia and Tennessee Railroad at Salem, which was the line of supplies of the Confederate army under Longstreet, besides destroying a large quantity of clothing, military equipments, and provisions. The strongest effort was now made to capture him, but, obtaining through a prisoner a knowledge of the enemy's plans, he succeeded in getting through the Confederate lines, reaching the National lines with 200 prisoners and



150 horses. In February, 1864, Averell was placed in command of the 2d Cavalry Division, and he fought continuously all that spring and summer. He was wounded in a skirmish at Wytheville, but this interfered with his active duty only a few days. In July and August he was fighting in the Shenandoah valley, at Winchester, and Martinsburg, and he closed that year's campaign at Mount Jackson, in September. March 13, 1865, he was made brevet major general for gallant action at Moorfields, Va., and, the war ending, he resigned. In 1866 Gen. Averell was appointed United States consul general at Montreal, which post he held three years. Aug. 17, 1888, he was reinstated in the regular army with the rank of captain, and Aug. 31 of the same year was retired. In his latter years he was interested in manufacturing. He was the inventor of a system of conduits for electrical wires, and in June, 1898, after litigation pending for seventeen years, the Supreme Court awarded him nearly \$700,000 as a result of a suit he had instituted against Amzi L. Barber for his share of the profits of the Barber Asphalt Paving Company.

Bagnall, Benjamin, missionary, China Inland Mission; Mrs. Bagnall; one child; all killed in Paoting-Fu, Chi-Li province, China, July 1, 1900.

Baily, Silas M., soldier, born in Brownsville, Pa., in 1836; died in Uniontown, Pa., May 5, 1900. At the beginning of the civil war he organized a company of the 8th Pennsylvania Reserve Corps, the first company to be mustered into service from Greene County, and in May, 1862, he was elected major of the regiment. He took part in the battles of Mechanicsville and Gaines's Mill, and in the latter he was seriously wounded in the head. He rejoined his regiment in Maryland just before the battle of Antietam, Sept. 17, 1862. At Fredericksburg, Dec. 13, he gallantly led the regiment, and was again wounded. He was at once promoted to be colonel, his commission dating from the battle of South Mountain, Sept. 14, 1862. He served also with Grant in the Wilderness. On May 13, 1865, he was brevetted brigadier general of volunteers for gallant and meritorious service during the war. Gen. Baily was a delegate to the National Republican Convention in 1880, and was one of the 306 who supported Gen. Grant. In 1881 he was elected Treasurer of Pennsylvania as a Republican.

Ball, Ebenezer Burgess, born in Loudon County, Virginia, in 1817; died in Washington, D. C., April 12, 1900. In 1843 he became a clerk in a dry-goods store in Washington. Tiring of this life, he journeyed westward, settling first on the banks of Osage river in Missouri, and finally in Oregon, on the site of the present town of Jackson. Here he remained several years, taking part in the Rogue river war, acting as Government agent on the Selentry Reservation, and amassing a considerable fortune as a post trader. At the beginning of the civil war he enlisted, and he served till its close. In the meantime he had lost all his savings, and until, through the kindness of Gen. Black, sometime Commissioner of Pensions, he was enabled to establish the little tobacco shop in the Pension Office he had a hard fight with Fate, all his efforts to obtain a place under the Government meeting with failure. Till the time of his death he was a familiar figure to frequenters of the Pension Office. Col. Ball was related to Washington on both sides of his family, and bore a striking resemblance to the first President of the United States. He always dressed in the uniform of a Continental general.

Banta, William Sickles, lawyer, born in Pasack, N. J., Dec. 12, 1824; died in Hackensack, N. J., May 7, 1900. He studied under Rev. J. D. Mabon, and was graduated at Rutgers College in 1844. He was admitted to the bar in 1847, and for ten years after 1860 he was public prosecutor of Bergen County, being the first Republican ever appointed to that office. In 1872 he was appointed judge of the Court of Common Pleas, to fill the unexpired term of Judge Ashbel Green, and he served for many years in this office. Judge Banta was, in 1860, county superintendent of public schools, and he held many local public offices. He was very wealthy, and was well known for his practical philanthropy.

Barbour, John Humphrey, clergyman, born in Torrington, Conn., May 29, 1854; died in Middletown, Conn., April 29, 1900. He was graduated at Trinity College in 1873. In 1876 he was ordained deacon in the Protestant Episcopal Church, in 1878 was admitted to the priesthood, and from 1876 to 1889 was minister of Grace Chapel, in Hartford. He also served as librarian of Trinity College from 1882 to 1889. In 1889 he accepted the chair of New Testament Literature and Interpretation in Berkeley Divinity School, Middletown, Conn., which he held until the time of his death. He was the author of *Beginnings of the Historic Episcopate*, and other religious works.

Barnard, Henry, educator, born in Hartford, Conn., Jan. 24, 1811; died there, July 5, 1900. He was graduated at Yale in 1830, studied law, and was admitted to the bar in 1835. He then spent fifteen months in study and travel in Europe, the greater part of the time in visiting educational and reformatory institutions. On his return he was elected to the Legislature, and in 1837 was chosen to organize the common-school system of the State. His first service was as secretary of the State Board of Education, from 1838 till 1842. He introduced schoolhouses of improved construction, high schools, teachers' institutes, normal academies, and entirely new methods of instruction. From 1843 till 1849 he was school commissioner of Rhode Island, doing the same service for the schools of that State that he had done for those of Connecticut. In 1850 he returned to his native State, and for four years he was State Superintendent of Schools. From 1857 till 1859 he was President of the University of Wisconsin, and in 1865 and 1866 president of St. John's College, Annapolis, Md. The National

Bureau of Education was established in 1867, and Dr. Barnard became the first United States Commissioner of Education. He organized the bureau and issued four valuable reports. In the first of these he advocated nearly every educational reform that has since been introduced in the United States. He resigned in 1870, and devoted the remainder of his life to the writing and publication of educational works. On his eighty-seventh birthday (Jan. 24, 1898), the public schools of Hartford were closed, and a distinguished audience gathered in the Capitol to do him honor as "the father of education"—a title that he shares with Horace Mann, his great contemporary and coworker. While secretary of the school board he established the Connecticut Common-School Journal, and in Rhode Island he issued the Rhode Island School Journal. In 1855 he began the publication of the American Journal of Education. His writings covered the whole range of educational activities, both theoretical and practical. Some of the more important titles are: School Architecture (1839; 10th ed., 1886); National Education (1840); Practical Illustrations of School Architecture; Report on Public Schools in Rhode Island (1845 and 1848); Documentary History of Public Schools in Providence; Education and Employment of Children in Factories; Normal Schools and Teachers' Institutes (1850); National Education in Europe (1854); Normal Schools in the United States and Europe; History of Education in Connecticut from 1838 to 1854; Educational Biography (1857); Papers for Teachers; Military Schools; Technical and Scientific Education; American Pedagogy; Discourses on the Life and Character of T. H. Gallaudet; Tribute to Dr. Gallaudet, with a History of the American Asylum; Hints and Methods for the Use of Teachers; American Teachers; Elementary and Secondary Instruction in Switzerland, France, Belgium, etc.; English Pedagogy; French Teachers, Schools, and Pedagogy; German Teachers and Educational Reformers; Life of Ezekiel Cheever, and Notes on the Free Schools of New England; American Journal of Education (ed. 1856-'86); Kindergarten and Child Culture Papers; Object Teaching, and Oral Lessons on Social Science and Common Things (1861); Pestalozzi and Pestalozzianism (1861); Primary Schools and Elementary Instruction; School Codes; Science and Art; Superior Instruction in Different Countries. A collected edition of his works was published in 1886, under the title *The American Library of Schools and Education*. It is in 52 volumes and contains more than 800 treatises, each being also published separately.

Bartol, Cyrus Augustus, clergyman, born in Freeport, Me., April 30, 1813; died in Boston, Mass., Dec. 16, 1900. He was graduated at Bowdoin College in 1832, and at Harvard Divinity School in 1835, and became the colleague of the Rev. Charles Lowell at the West (Unitarian) Church, Boston, in 1837. After the death of the senior pastor, in 1861, he continued in charge of the parish until the dissolution of the society in 1888. In the earlier portion of his ministry he might have been classed with the Channing Unitarians, as the more conservative members of the body were styled; but as time went on he became known as an extremely radical thinker. He was always a fearless speaker, and at all times an enthusiastic advocate of philanthropic and other reforms. His tender nature and intense spirituality endeared him to all who came within the sphere of his influence. He published *Discourses on the Christian Spirit and Life* (1850); *Discourses on the Christian Body and Form*; Pic-

tures of Europe (1855); *History of the West Church and its Ministers* (1858); *Church and Congregation* (1858); *The Word of the Spirit to the Church* (1860); *The Unspotted Life* (1864); *Radical Problems* (1872); *The Rising Faith* (1874); *Principles and Portraits* (1880); *Spiritual Specifics* (1884).

Beard, William Holbrook, painter, born in Painesville, Ohio, April 13, 1825; died in New York city, Feb. 20, 1900. He began sketching when a very little boy, but his early instruction, beyond such as he could impart to himself, seems to have consisted only of a few lessons from his elder brother, James Henry Beard. He began his professional career as a traveling portrait painter in 1846, and after four years settled in Buffalo, where he remained until his departure for Europe in 1857. He took with him several important commissions, and spent three years painting and sketching in Düsseldorf, and in Italy, Switzerland, and France. He returned in 1860, and after a short time in Buffalo made his permanent home in New York city. He was elected to the National Academy in 1862. His father was a judge of the Supreme Court of Connecticut. In the last years of his life Mr. Beard devoted himself almost exclusively to the humorous painting of animals, in which he was eminently successful. He published collections of his sketches under the title *Humor in Animals*, and a text-book entitled *Action in Art*. Among his best-known pictures are: *Kittens and Guinea Pigs*; *Bears on a Bender*; *Court of Justice*; *The Astronomers*; *The Watchers*; *Bears' Dance*; *Raining Cats and Dogs*; *Naughty Cubs*; *Death and Chivalry*; *The Barroom Politicians*; *Pets on a Spree*; *Old Time Club Life*; *Hark*; *The Wreckers*; *The Approach of Spring*; *Oh, My!*; *Horse Market in Brittany*; *Worn Out*; *The Eagle*; *Lo! the Poor Indian*; *The Dancing Lesson*; *Who! who-o!*; *How d'do. Wabbit?*; *Ain't you Ashamed of Yourself?*; *Eavesdropper*; *Who's Afraid?*; *Darwin Expounding his Theories*; *Bulls and Bears in Wall Street*; *The Fallen Landmark*; and *Cattle on a Thousand Hills*. His *March of Silenus*, belonging to the Buffalo Fine Art Gallery, and *Lo! the Poor Indian* were at the Centennial Exhibition of 1876. To the Paris Exposition of 1878 Mr. Beard sent *The Wreckers*.

Beecher, Charles, clergyman, born in Litchfield, Conn., Oct. 7, 1815; died in Georgetown, Mass., April 21, 1900. He was the last surviving son of the Rev. Lyman Beecher. He studied at the Boston Latin School and Lawrence Academy, Groton, Mass., and was graduated at Bowdoin in 1834. After a theological course at Lane Seminary, of which his father was the head, he became pastor of the Second Presbyterian Church in Fort Wayne, Ind., in 1844. Owing to some differences of belief between himself and members of the church, he left, in 1851, and became pastor of a Congregational church in Newark, N. J., from which he went to the First Congregational Church in Georgetown, Mass. From 1870 till 1877 he resided in Florida, and was for two years State Superintendent of Public Instruction. He was



afterward pastor of a church in Wysox, Pa. During his later years he did not preach. He was a gifted musician, and had charge of the music in the compiling of the Plymouth Collection of Hymns and Tunes. He also edited the Autobiography and Correspondence of Lyman Beecher, and was the author of Redeemer and Redeemed; Eden Tableau; The Incarnation, or Pictures of the Virgin and her Son; David and his Throne; Spiritual Manifestations; and Patmos.

Beecher, Thomas Kinnicut, clergyman, born in Litchfield, Conn., Feb. 10, 1824; died in Elmira, N. Y., March 14, 1900. He was the sixth son of the Rev. Lyman Beecher. He was graduated at



Illinois College, of which his brother Edward was president, in 1843. He was first principal of the Northeast Grammar School in Philadelphia, and then of the Hartford (Conn.) High School. In 1852 he removed to Williamsburg (now a part of New York city) and organized and assumed charge of the New England Congregational Church. In 1854 he settled in Elmira, where he

became pastor of the Independent Church (now called Park Church), and remained there till the time of his death. In 1863 he was chosen chaplain of the 141st New York Volunteers, and he served with the Army of the Potomac four months. In 1864-'65 he visited South America, and in 1873 revisited England. He was at different times nominated by Democrats, Republicans, Greenbackers, and Prohibitionists, and had been a candidate for nearly every office within the gift of the American people save those of Governor and President. He was fond of mechanics, and for years took care of the Elmira town clock, correcting its time and making the observations himself without cost to the city. When on his way to New York city he would run the locomotive. He was a lover of books and art, a keen critic, and for many years wrote a column of miscellany on current questions, first for the Elmira Advertiser and then for the Gazette. His only published volume is *Our Seven Churches* (New York, 1870), a liberal estimate of the Roman Catholic, Presbyterian, Protestant Episcopal, Methodist Episcopal, Baptist, Congregational, and Liberal Christian denominations, many parts of which have been printed separately as tracts and widely circulated. Thomas Beecher never became a national figure, as did his brother, but, like him, was a man of independent and aggressive character, advanced views, and courage in the expression of his convictions. In a city where he was not known and loved as he was in Elmira he would infallibly have been regarded as a crank, and his personal appearance and habits often caused his fellow-clergymen anxiety. Although in receipt of a comfortable salary, he was always impoverished and shabby. All his money beyond what was required for the bare necessities of his household went to charity. His big, sturdy figure, clad in an old and rusty coat, and his handsome face and flowing white hair surmounted by a velvet cap in sad disrepair, were familiar sights as he drove about with his wife

(a granddaughter of Noah Webster) in their old-fashioned buggy, distributing potatoes, coal, or other necessities to poor families. The workingmen with whom he was fond of associating called him Father Tom; but he even resented the respect and affection of the nickname, never calling himself minister or preacher, but merely teacher. Park Church occupies an edifice valued at \$150,000, and has a membership of 700, with 1,000 Sunday-school children. He made it into an institutional church, the first of its kind, it is said, in the country. He put in a stage for theatrical productions, bowling alleys, gymnasiums, and parlors. It was a great innovation, and caused considerable talk, but it gave him opportunities to exemplify his ideas of practical Christianity. It took years to build, because the pastor would not permit a brick or a stone to go into the structure until it was paid for. The Sunday school he made a remarkable institution. Every lesson was written by Mr. Beecher himself. The school was graded as rigidly as any ward day school, and the children had to learn their lessons as thoroughly as in a secular school or leave. In the details the pastor was assisted by Mrs. Beecher, but the ideas were his own. As a result of his personality and his system the school has had a phenomenal growth. On the first Sunday of each month Mr. Beecher used to deliver a special sermon to the children, and attendance at this service was made a requirement for promotion. The Beecher home was a refuge for the poor and for those in trouble. This appreciation of his church and its work was written in 1888: "However other churches may differ in doctrine, methods, and manner from Park Church, probably those churches are few that could not profitably take lessons from her in the care bestowed upon the stranger, on the young man and woman away from home, on the sick, on the poor and desolate. In wise aid and tender helpfulness Park Church is eminent, and her charity is not limited to bestowals upon the usual objects of benevolence. She knows the greater charity that is charitable to peers, which when all is done I have thought outranks the rest. It is comparatively easy to be kind to the suppliant, but to the erect worker, who neither asks nor accepts alms, but looks us in the face with a reasonable assurance and feels able to do full as well as we do, charity is sometimes denied. We too often grow jealous of these and suspicious. When this is true of churches, the cause of Christ bends under useless burdens. These burdens are not so heavy as once they were. That they are not heavier in Elmira is largely accounted for by the generous life and heart of Mr. Beecher and the good fellowship of his church."

Beekman, Henry Rutgers, lawyer, born in New York city, Dec. 8, 1846; died there, Dec. 17, 1900. He was graduated at Columbia College in 1865, and at the Law School in 1867, and became a member of the law firm of Beekman & Ogden. He was a school trustee in 1884, and in the latter part of same year he was appointed park commissioner, to fill a vacancy. In 1886 he was reappointed for five years, and was elected president of the Department of Parks. The same year he was elected president of the Board of Aldermen, and resigned his office of park commissioner. At the expiration of his term of office, one year later, he was appointed counsel for the corporation, which office he held until Mayor Grant appointed his successor. While he was corporation counsel he was active in the promotion of rapid transit, and when, in 1894, the subject was taken up by the Chamber of Commerce, he drew the bill that became law. Under the commission created by

that bill he was appointed as one of the counsel, and he served in that capacity until his election to the bench. In 1889 Gov. Hill named him as one of the commissioners for the promotion of uniformity of legislation in the United States with respect to marriage, divorce, and other subjects. In November, 1894, Mr. Beekman was elected judge of the Superior Court of the city of New York on the union ticket headed by William L. Strong, and upon the consolidation of the courts under the new Constitution, Jan. 1, 1896, he became a justice of the Supreme Court in the First District.

Behrends, Adolphus Julius Frederick, clergyman, born in Nymwegen, Holland, Dec. 13, 1839; died in Brooklyn, N. Y., May 22, 1900. He came to this country with his father, a Lutheran clergyman, in 1845. He was graduated at Dennison University, Granville, Ohio, in 1862, and at Rochester Theological Seminary in 1865. He was called to the Baptist Church in Yonkers, N. Y., where he was ordained on July 27, 1865. His ministry there was remarkably successful, and in 1873 he was called to the First Baptist Church of Cleveland, Ohio. In the same year the degree of doctor of divinity was conferred on him by Richmond College, Richmond, Va., he being the first Northern man to receive the honor from that institution. He remained pastor of the Cleveland church till Feb. 1, 1876, when, on account of a change in his doctrinal views, he left the Baptist denomination and accepted the pastorate of the Union Congregational Church of Providence, R. I., where he remained till 1883. Dr. Behrends was installed pastor of the Central Congregational Church of Brooklyn, March 1, 1883. In 1886 he was chosen as the Ely lecturer in Hartford Theological Seminary, and his lectures were published under the title of *Socialism and Christianity*. He was the Lyman Beecher lecturer at Yale Divinity School in 1890, and the degree of doctor of sacred theology was conferred upon him by that university the same year. His lectures at Yale on *The Philosophy of Preaching* were published, and he also published *The World for Christ* and many pamphlets, and was a frequent contributor to periodicals. He was chaplain at large, with the rank of captain, in the National Guard of the State, and was the successor of the Rev. Dr. Talmage as chaplain of the 13th New York Regiment. Dr. Behrends was a fearless and forceful speaker, and his tolerance and liberality in matters of Christian belief made his church conspicuous in the denomination. During the trolley strike in 1895 he made a strong address from the pulpit, advocating stern military measures to suppress violence. He was a prominent figure in the Oecumenical Conference on Foreign Missions in New York city in 1900, and on May 6 made a notable address before that body—an impassioned plea for the unity of Christendom and the abolition of creeds—which excited universal interest and comment.

Benjamin, William H., soldier, born in Wilton, Conn., Oct. 18, 1825; died in Rochester, N. Y., Jan. 5, 1900. He moved with his parents to Rochester, N. Y., when a boy, and was educated in the public schools. At the beginning of the civil war he assisted in organizing the 8th New York Cavalry, and went to the front with the rank of major. He was wounded in the battle of Cold Harbor. He was made lieutenant colonel for gallant conduct at Gettysburg, and in the autumn of 1863 took command of the regiment. At the close of the war he was brevetted brigadier general. Afterward he engaged in business. In 1895 he was Deputy Collector of Customs.

Biddle, Horace P., jurist, born in Fairfield County, Ohio, March 24, 1811; died in Logans-

port, Ind., May 16, 1900. He received only a common-school education, but studied by himself Latin, German, French, Italian, and Spanish. He was admitted to the bar in 1839, and in 1840 began practice in Logansport, Ind. He was elected judge of the Eighth Circuit Court in 1846, and was a member of the convention that framed the present Constitution of Indiana in 1850. He was defeated for Congress in 1852, and in 1857 was elected judge of the Supreme Court, but was not commissioned. He was re-elected by a majority of 33,000 in 1874, and served six years. He was a circuit judge nineteen years. Judge Biddle retired from active life in January, 1881. He published *A Few Poems* (1858), *The Musical Scale* (1860), *Biddle's Poems*, *American Boyhood*, *Elements of Knowledge*, *Prose Miscellany*, *Glances at the World*, and *Last Poems*.

Bidwell, Dollie (Mrs. Charles Bidwell, afterward Mrs. Lovering Kissam), actress, born in Seabrook, N. H., April 13, 1843; died in New York city, Jan. 25, 1900. She made her first appearance in Boston at the National Theater as Jeanette in the *Idiot Witness* in the autumn of 1860. She then was engaged by Joseph Procter to support him in his starring tours, and became very popular throughout New England, where she ultimately became herself a star. For many years she played a drama that was written for her, called *The Pretty Panther*. On her marriage to Mr. Kissam, in 1880, she retired from the stage.

Bidwell, John, born in Chautauqua County, New York, Aug. 5, 1819; died in Chico, Cal., April 4, 1900. In 1831 his parents settled in Ashtabula County, Ohio. He attended the Kingsville Academy, and taught school in Ohio and Missouri till 1841, when he crossed the Rocky mountains with the first overland party to California. He enlisted in defense of California against the native chiefs Castro and Alvarado in the revolt of 1844 and 1845, and acted as aide-camp to Sutter till the war ended by the expulsion of the Mexican Governor, Micheltorena. One of Gen. Frémont's first acts after the war was to appoint young Bidwell, who had risen to the rank of major, magistrate of San Luis Rey District. In 1849 he was chosen a member of the Constitutional Convention, and the same year he was elected to the Senate of the first Legislature. In 1850 he was appointed by Gov. Burnett one of the commissioners to convey to Washington the block of gold-bearing quartz, California's contribution to the Washington monument. In 1860 he was a delegate to the Democratic Convention in Charleston, S. C. In the civil war he commanded, in 1863, the 5th Brigade, California Volunteers. In 1864 he was a delegate to the Baltimore convention that renominated President Lincoln. In the same year he was elected to Congress. In 1875 he was a candidate for Governor of California on the nonpartisan, antimonopoly ticket, but was defeated. In 1890 he was the Prohibition candidate for Governor, and two years later was nominated, at Cincinnati, by the National Prohibition party, for the presidency. Gen. Bidwell was a sincere Prohibitionist, and on espousing the cause of the party destroyed \$500,000 worth of wine, rooted out of his vineyard all his wine-growing vines, and turned his winery into a school for Indian children. His property, about 30,000 acres of the richest soil in the Sacramento valley, is one of the finest fruit-growing ranches in the world.

Bingham, John Armor, diplomatist, born in Mercer, Pa., Jan. 21, 1815; died in Cadiz, Ohio, March 19, 1900. He was educated at Franklin College, New Athens, Ohio, and went to Cadiz in

1840, immediately after his admission to the bar. In 1854 he was elected to Congress from the 21st (later the 10th) Ohio District. He was returned to Congress until 1863, and won fame as an orator. He was the friend and adviser of President Lincoln, who in 1864 appointed him Judge-Advocate General, and later in the same year solicitor of the United States Court of Claims. The day after the President's assassination he was called from his home in Cadiz by a message from Secretary Stanton, and within twenty-four hours after his arrival in Washington he had opened an office and formulated plans that resulted in the arrest, trial, and conviction of the conspirators. He was appointed Special Judge Advocate by President Johnson, and a member of the military commission, and the work of examining and cross-examining the witnesses fell largely to him. He also made the principal argument for the prosecution, requiring nine hours for its delivery. Mr. Bingham was a member of the committee to which was intrusted the important duty of drawing up the articles of impeachment against President Johnson; and he acted as chairman in the impeachment proceedings before the Senate. He began the closing argument on Monday, May 4, 1868, and for three days occupied the attention of the Senate and a vast audience. He was in Congress for eight years after 1865, and he held the Japanese mission from 1873 till 1885. Mr. Bingham, as chairman of the House committee to which it was referred, was largely responsible for the wording of the fourteenth amendment to the Constitution. He left office as poor as when he entered it, and in 1898, by special act of Congress, he was granted a Government pension.

Bird, Bowena, missionary, American Board of Foreign Missions, born in Sandoval, Ill., July 31, 1865; killed in Taku, Shensi province, China, July 31, 1900. She studied at Oberlin College; sailed for China in September, 1890, and since that time had been stationed in Taku.

Blanchard, George Roberts, railway expert, born in Rochester, N. Y., June 15, 1841; died in New York city, Oct. 8, 1900. He entered the offices of the old Cincinnati and Chicago Railroad in 1858, and in 1860 began a four years' service as clerk, chief freight clerk, and general freight agent with the Ohio and Mississippi Railroad Company. From May, 1864, till October, 1867, he was general freight agent of the Central Ohio Railroad, and from that time till October, 1872, filled the corresponding office with the Baltimore and Ohio Railroad Company. Two years later he left the Baltimore and Ohio to serve in the same capacity with the Erie Railway Company, and in July, 1874, was appointed vice-president of that company, discharging the duties of that office until October, 1884. In February, 1886, he was chosen a commissioner of the Central Traffic Association, with headquarters in Chicago, and in the following spring was made its chairman. He severed his connection with the Central Traffic Association at the close of 1895 to become commissioner of the Joint Traffic Association, holding that office till the dissolution of the association, in November, 1898. After that time Mr. Blanchard devoted himself to work as a railway expert, and was considered one of the foremost authorities in the country. His fatal illness was brought on by overwork while preparing, in the interest of several railroads, an argument against the Cullom bill enlarging the powers of the Interstate Railroad Commission and against the bill introduced in Congress providing for a reduction of the compensation to railroads for

the carrying of the mails. He was a director of the United States Express Company, the Standard Coupler Company, and the Safety Car Heating and Lighting Company, and was president of the American Mutoscope and Biograph Company. He wrote much in both prose and poetry, and composed many pieces of music. His house contained many examples of the best work of modern artists in painting and sculpture.

Bliss, Zenas Randall, soldier, born in Johnston, R. I., April 17, 1835; died in Washington, D. C., Jan. 2, 1900. He was graduated at West Point in 1854, and joined his regiment, the 1st Infantry, at Fort Duncan, Texas, as brevet second lieutenant July 1 of that year. On March 3, 1855, he was promoted to be second lieutenant of the 8th Infantry, and he served on the Texas frontier till 1861, most of the time in command of a detachment of mounted infantry scouting against hostile Indians. He was promoted to be first lieutenant Oct. 17, 1860, and to the captaincy May 14, 1861. In March, 1861, while in command of Fort Quitman, Texas, garrisoned by a company of the 8th Infantry, he received orders to join the command under Capt. Reeve, 8th Infantry, then under instruction to march with 6 companies of the regiment to San Antonio, Texas, with a view of transferring the command to the North. After a march of 600 miles Reeve was met at Adams Hill, near San Antonio, by the Confederate Gen. Earl Van Dorn with more than 2,000 men, and after a reconnaissance surrendered, May 9, 1861. Capt. Bliss was held as a prisoner of war in San Antonio till February, 1862, when he was transferred to Richmond, Va., and on April 5 was exchanged. May 26, 1862, he was appointed colonel of the 10th Rhode Island Volunteers, and on Aug. 17 was transferred to the colonelcy of the 7th Rhode Island Volunteers, and he held that commission until mustered out of the volunteer service, June 9, 1865. He took part in many important battles, and was recommended several times for promotion to brigadier general on account of his gallantry and his skillful handling of troops under fire; but the honor was deferred. He commanded the 1st Brigade, 2d Division, 9th Army Corps, in the battle of the Wilderness, and was brevetted lieutenant colonel, May 7, 1864, for gallant and meritorious services. After the war he commanded at the Schuylkill Arsenal; at Fort Porter, N. Y.; and in the district of Chester, S. C., where he acted as assistant commissioner of the Freedmen's Bureau, provost marshal, and provost judge, and also transacted all the civil business of the district. He commanded with distinction in Texas in 1871-'72, during the Mexican revolution, and was credited with preventing war between that country and the United States. He was made major of the 39th Infantry, Aug. 6, 1867; transferred to the 25th Infantry, March 15, 1869; made lieutenant colonel, 19th Infantry, March 4, 1879; and colonel, 24th Infantry, April 20, 1886. April 25, 1895, he was appointed brigadier general, and on May 14, 1897, major general. Gen. Bliss was retired, at his own request, May 22, 1897.

Bolter, Andrew, entomologist, born in Sigmaringen, Prussia, in 1820; died in Chicago, March 18, 1900. He left Germany on account of his supposed connection with the revolution of 1848, and resided in Chicago forty-five years. Although regarded as a high authority, Mr. Bolter contributed no books to scientific literature. He frequently, however, in response to requests for information from instructors and students of insect life, wrote long letters on various phases

of the subject, and his reputation for practical knowledge was widespread. He was a member of the Academy of Science in Chicago, and of the New York Entomological Society. From boyhood Mr. Bolter's chief pursuit outside of business hours was the collection of insects. His collection of beetles, butterflies, and other insects is said to be the finest on the continent, and one of the most complete private collections in the world.

Bowen, Anna Maud, educator, born in Chicago, Ill., in 1872; died there, Jan. 28, 1900. She entered Chicago University in 1891. As a freshman, in the philosophical course, she accomplished twice the amount of work required, and she was graduated in 1894, with the degree of bachelor of philosophy. In 1895 she was made a fellow of philosophy at Cornell, and in two years received the degree of Ph. D. After a course at Leipsic she was made dean of the seminary at Martin's Ferry, Ohio, and then became an editorial writer on the Nation, which place she held until her appointment, in June, 1899, as dean of Woman's Hall, Northwestern University. She was the youngest woman ever appointed to that post.

Bowman, William Spener, theologian, born in Virginia, Aug. 3, 1830; died at Mount Pleasant, N. C., March 26, 1900. His parents were descendants of Germans who settled in the valley of Virginia prior to the Revolutionary War. He was educated in the common schools of his native country, studied languages and theology under private tutors, and was ordained to the office of the ministry by the synod of Virginia in 1856. He served parishes in Virginia, South Carolina, and Georgia, having a congregation in Savannah during the last nine years of his life. He received the degree of doctor of divinity from Newberry College in 1870, and was president of the board of the same institution for many years. Besides this, he held many posts of honor and trust in the Southern Church, and received recognition as a literary and scientific scholar.

Boyd, Belle (Mrs. Nathaniel High), actress and dramatist, born in Martinsburg, W. Va., in May, 1843; died in Kilbourne, Wis., June 11, 1900. During the war she was a Confederate spy, and was commissioned captain. She was captured in 1864, and sentenced to be shot, but managed to escape on her promise to go to England. There she married Lieut. Hardinge, a Federal officer who had aided her to escape the death penalty, and after his death, in 1869, she married John Hammond, a former officer of the British army. She made her first appearance at the Theater Royal, Manchester, England, in the autumn of 1866, as Pauline, in *The Lady of Lyons*, under the tutelage of Walter Montgomery and Avonia Jones. After a few weeks of popular success with the Manchester company she came to St. Louis, Mo., where she played her second engagement, and immediately afterward began a successful starring tour of the Southern States. In 1868 she became a member of the Miles & Bates stock company in Cincinnati, under the name Nina Benjamin. In the same year she was engaged as a leading member of the company, playing in Galveston and Houston, Texas, and in 1869 was in a similar place in the St. Charles's Theater, New Orleans. On Feb. 22, 1876, she began at Toledo, Ohio, a highly successful dramatization of her own adventurous career as a Confederate spy, which she played throughout the country for fifteen years. She married in 1885 Nathaniel High, of Toledo. Boucicault's Belle Lamar is supposed to be a rearrangement of her play Belle Boyd.

Braden, John, educator, born Aug. 18, 1828; died in Nashville, Tenn., June 10, 1900. Dr. Braden was one of the founders of Central Tennessee University, one of the largest institutions in the South for the education of colored youth, and had been its president since 1869. He was graduated at Ohio Wesleyan University in 1853, and taught for a year in Xenia Female Seminary. In 1854 he was admitted to the Cincinnati Conference of the Methodist Episcopal Church, and he filled Methodist pulpits and preached in Methodist schools until 1868, when he was appointed principal of the city schools of Nashville. One year later he became president of Central University. Iowa University conferred on him the degree of D. D. in 1873.

Brown, John Wesley, clergyman, born in Baltimore, Md., July 7, 1837; died in New York city, Nov. 10, 1900. He was graduated at Dickinson College in 1855, as a civil engineer, and was for two years in the Government service. He then returned to Dickinson Seminary, and in 1858 entered the Methodist ministry, but in 1866 entered the Protestant Episcopal Church. His first charge was in Middleton, Del. He was rector of Trinity Church, Philadelphia; Christ Church, Detroit; Trinity Church, Cleveland; and for five years of St. Paul's Church, Buffalo. On June 1 he succeeded the Rev. Dr. William F. Morgan in the rectorship of St. Thomas's Church, New York city. While in Buffalo he was president of the Society for Prevention of Cruelty to Animals, and was chaplain of the 65th New York Regiment. He was widely interested in the organizations and charities of his denomination.

Brown, Moses True, elocutionist, born in Deerfield, N. H., March 4, 1827; died in Sandusky, Ohio, Sept. 11, 1900. He was educated at the high school, Manchester, N. H. He taught school in his early manhood, and was for six years superintendent of the public schools of Toledo, Ohio. He was for two years critic and literary adviser for the firm of Van Antwerp Bragg & Co., of Cincinnati, Ohio, and then resigned his place with that house to become a teacher of elocution in the schools and colleges of the country. He met with great success, and was known as one of the foremost interpreters of Dickens. He finally settled in Boston, and soon afterward became Professor of Oratory in Tufts College, where he remained more than twenty years. During this time he taught in the Boston School of Oratory, and in 1886 became its president. He resigned in 1894 and removed to Sandusky, Ohio, and devoted his time to lecturing. In 1899 he was elected to the chair of the Philosophy of Expression in Ohio Wesleyan University. He was the author of *The Synthetic Philosophy of Expression*.

Browne, William Henry, lawyer, born in New York city, June 24, 1828; died in Charlestown, W. Va., Sept. 15, 1900. During the Mexican War he enlisted, was made second lieutenant, engaged in all the battles from Vera Cruz to the taking of the city of Mexico, and was promoted first lieutenant and brevetted captain. After the war he returned to New York city, where he became identified with the City Troop, the Fusiliers, and the regiment now known as the 7th. When the Republican party was formed he was active in organizing party clubs, and was chairman of the meeting that nominated John C. Frémont for the presidency. At the outbreak of the civil war he raised at his own expense 14 companies, which were marched to Albany to fill up regiments forming there. He was commissioned lieutenant colonel of the 31st Regiment, New York Volunteers, and later was promoted colonel of the 36th New

York. He led a mixed brigade at the second battle of Fredericksburg, and was severely wounded at Salem Church. He was appointed a colonel in the invalid corps and assigned to command the 2d Brigade, Veteran Reserve Corps. Later he was made brigadier general by brevet. He was stationed in Baltimore as Gen. Frye's aid in charge of Maryland and Delaware. After the war he settled in Washington, and built up a practice as a consulting lawyer in trade-mark cases. He was the compiler of Browne on Trade-marks.

Bruce, Catherine Wolfe, philanthropist, born in New York city, Jan. 22, 1816; died there, March 13, 1900. She was a daughter of George Bruce, the type founder, in whose honor she built, established, and endowed the George Bruce Free Library, a branch of the New York Free Circulating Library. In 1888 she gave \$50,000 to Harvard College observatory for the purchase of a photographic telescope, and later gave other sums for astronomical work. The Bruce memorial telescope, which was at first placed in Harvard College, was taken to Arequipa, Peru, in 1895, and set up in Harvard observatory there. In 1897 she gave a fund to the Astronomical Society of the Pacific for the award of a gold medal once a year for distinguished service in astronomy. She wrote and published a translation of the *Dies Iræ* (1890).

Burke, Joseph W., soldier, born in Ireland in 1830; died in Jacksonville, Ala., Nov. 7, 1900. In early manhood he settled in Dayton, Ohio. He raised a regiment for the National service, and fought through the civil war. He was with Sherman in his march to the sea, and for his bravery in the battles of that campaign was brevetted major general. After the war he settled in Jacksonville, Ala., and was interested in the development of the commercial and mineral resources of the State. He was collector of the port of Mobile under the administrations of Presidents Harrison and McKinley.

Burr, Alfred Edmund, journalist, born in Hartford, Conn., March 27, 1815; died there, Jan. 8, 1900. After obtaining a common-school education he became connected with the Connecticut Courant, and learned every department of newspaper work, from typesetting to editorial work. In January, 1839, he purchased a half interest in the Hartford Times, a Democratic paper, and in 1841 became its editor and sole proprietor. In 1853, and again in 1866, Mr. Burr was elected to the Legislature. In 1864 he took strong ground against the repeal of the Missouri compromise, standing almost alone in his party in the opposition. In 1860 he supported Breckenridge and Lane. For more than twenty-five years he headed the Connecticut delegations to the Democratic national conventions. He was president of the commission that built the State Capitol in Hartford; one of the original members of the State Board of Health, which was established in 1878; president of the State Board of Pardons, constituted in 1883; and a member of the permanent State Commission on Art and Sculpture. He was the oldest newspaper editor in New England.

Camp, Henry, evangelist, born in Youngstown, Ohio, in 1835; died in New York city, Jan. 4, 1900. At the beginning of the civil war he entered the National army as a private, and by gallant service rose to the rank of major. After the war he became interested in evangelical work in the West. He was chief evangelist in the Tabernacle in Detroit for about four years. For some months previous to his death he had preached every night in the Mariner's Temple, New York city.

Carlin, James W., naval officer, born in 1848; died on the Pacific Ocean, Dec. 30, 1890. He was

graduated at the Naval Academy, April 10, 1869; promoted master, July 12, 1870; lieutenant, Feb. 12, 1874; lieutenant commander, May 10, 1895; and commander, March 25, 1898. In 1889 he was executive officer of the *Vandalia* in the memorable hurricane of that year at Apia, Samoa, and after the death of Capt. Schoonmaker was in command of the ship. From March, 1898, he had charge of a supply ship, and made trips between Australia and the Philippines. At the time of his death he was on his way to the naval hospital at Yokohama to be treated for peritonitis.

Carman, Elbert S., journalist, born in Hempstead, Long Island, in 1836; died in New York city, Feb. 28, 1900. He was graduated at Brown University in 1858, and engaged in business in New York city. He contributed articles on out-of-door life to *Turf, Field, and Farm* and *Moore's Rural New Yorker*. He became associate editor of the latter paper, and in 1876 bought it and changed its name to *Rural New Yorker*. In connection with the paper he established the Rural Grounds at River Edge, N. J., which were devoted to the work of testing new plants, vines, and seeds and to the originating of new varieties. He published *Setter and Pointer* (1872).

Carpenter, Francis Bicknell, portrait painter, born in Homer, N. Y., Aug. 6, 1830; died in New York city, May 23, 1900. He was mostly self-taught, receiving his only instruction in art during six months in 1844 in the studio of Sanford Thayer in Syracuse. He came to New York city in 1851, and one year later was elected an associate of the National Academy. Among those who sat to him for portraits were Presidents Fillmore, Pierce, and Lincoln, William Henry Seward, Charles Sumner, George William Curtis, James Russell Lowell, Henry Ward Beecher, Horace Greeley, Schuyler Colfax, and John C. Frémont. His portrait of President Fillmore is in the City Hall, New York city, and that of President Lincoln in the Capitol in Albany. In 1864 he painted a large historical picture representing President Lincoln signing the Emancipation Proclamation. It was exhibited in the principal Northern cities in 1865, and afterward purchased by Mrs. Elizabeth Thompson for \$25,000 and presented by her to the nation. It hangs in the staircase of the House of Representatives in Washington. Another picture, *International Arbitration*, was bought by Mrs. Carson, and presented to Queen Victoria in 1892. Mr. Carpenter published in 1866 *Six Months in the White House with Abraham Lincoln*.

Chamberlain, Mellen, lawyer and librarian, born in Pembroke, N. H., June 4, 1821; died in Chelsea, Mass., June 25, 1900. He was graduated at Dartmouth College in 1844. After teaching several years at Brattleboro, Vt., he entered Dane Law School, Cambridge, was admitted to the bar in 1849, and practiced many years in Boston, having his residence in Chelsea. In the latter city he held sundry municipal offices. In 1858 and 1859 he was a member of the Legislature, and in 1863 and 1864 he was a member of the State Senate. He was appointed a justice of the municipal court of Boston in July, 1866, and served till 1878. During part of this time he was its chief justice. In August, 1878, he was elected librarian in chief of the Boston Public Library, and he served till October, 1890, when he retired on account of impaired health. He received the degree of LL. D. from Dartmouth College in 1885. He was the author of many pamphlets on historical and literary subjects. Some of his published works are *John Adams, the Statesman of the American Revolution* (Boston, 1884); *The*

Authentication of the Declaration of Independence (Cambridge, 1885); and John Adams, the Statesman, with Other Essays and Addresses, Historical and Literary (Boston, 1898).

Chittenden, Lucius Eugene, lawyer, born in Williston, Vt., May 24, 1824; died in Burlington, Vt., July 22, 1900. He was educated in the common schools, studied law, and was admitted to the bar at St. Albans in September, 1844. He removed to Burlington, where he practiced law for several years. He was prominent in the anti-slavery and free-soil movements, and became a Republican with the birth of that party. From 1856 till 1860 he was State Senator. In February, 1861, he was a delegate to the Peace Conference in Washington. The same year he was made register of the Treasury, and he served four years. At the close of the civil war he went to New York city, where he practiced law till 1897. In July, 1896, he was appointed assistant cashier in the New York office of the State Excise Department. He had a valuable library, rich in volumes relating to the early history of printing and engraving. His published works include Report of the Debates and Proceedings in the Secret Sessions of the Conference Conventions, February, 1861 (New York, 1864); The Capture of Ticonderoga (Rutland, 1872); Recollections of President Lincoln and his Administration (New York, 1891); Personal Reminiscences, 1840-1890 (1893); An Unknown Heroine (1893); and Abraham Lincoln's Speeches (1895).

Church, Frederick Edwin, landscape painter, born in Hartford, Conn., May 4, 1826; died in New York city, April 7, 1900. He became the pupil of Thomas Cole, in Catskill, N. Y., lived and worked in Catskill for several years, and then established his studio in New York city. His work attracted wide attention, and in 1849 he was made a full member of the National Academy. In 1853, and again in 1857, he traveled in South America, gathering the material for his great picture of tropical and mountain scenery, entitled *The Heart of the Andes*, which was first exhibited in 1859, and created a sensation. It was bought by William T. Blodgett for \$10,000, the highest price that had then been received for a picture by an American artist. A few years later he joined an expedition to Labrador, and from sketches made on this trip painted his *Icebergs*, which was exhibited in London in 1863. In 1866 he went to Jamaica, West Indies, and in 1868 made his first visit to Europe, going to Palestine and Greece, and painting *The Parthenon*, *Jerusalem*, and other important pictures. His best known picture is the *Great Falls at Niagara* (1857), which was originally purchased by John Taylor Johnston, and at the sale of the Johnston collection, in 1876, was bought by the Corcoran Art Gallery, in Washington, for \$25,000. This picture was exhibited throughout Europe and the United States, and was awarded a medal of the second class at the exposition in Paris in 1867. His other important pictures are *The Andes of Ecuador* (1855); *Cotopaxi* (1862); *Chimborazo* (1864); *St. Thomas in the Vale*, *Jamaica*; *Niagara, from the American Side* (1866); *Damascus* (1869); *Rainy Season in the Tropics*; *Jerusalem* (1870); *The Parthenon* (1871); *El Khasna Petra* (1872); *Tropical Moonlight* (1874); *Ægean Sea*; *Valley of Santa Ysabel* (1875); *El Ayn*; *Twilight in the Wilderness* (1876); *Morning in the Tropics* (1877); *The Monastery* (1878); *Valley of Santa Marta* (1879); and *A South American Landscape*. The last is owned by the National Academy; *Cotopaxi* is in the Lenox Library, New York city. Mr. Church

was an early admirer of Turner and his work, then being brought into prominence through the writings of John Ruskin, and this influence is traceable in many of the details of his paintings.

Churchill, John Wesley, clergyman, born in Fairlee, Vt., May 20, 1839; died in Andover, Mass., April 13, 1900. He was educated at Phillips Academy, Andover, and at Harvard, being graduated in 1865. In 1868 he completed his theological education at Andover Seminary. He received his official appointment to the professorship of Pulpit Delivery in Andover Seminary on the day of his graduation, which chair he held till his appointment as Professor of Sacred Rhetoric in the same institution in 1896. He was the regular instructor in elocution in Phillips Andover Academy and Abbott Seminary from 1867 till the time of his death, and had given instruction for years in Brown University, Amherst, Dartmouth, Smith, Wellesley, and Mount Holyoke Colleges; and in Harvard Divinity School during the last ten years of his life. Prof. Churchill attained wide fame as a college preacher, and his services were sought for by institutions in all parts of the country. He was also one of the editors of the *Andover Review*.

Clapp, Dwight H., missionary, American Board, born in Middlefield, Ohio, Nov. 1, 1841; **Mary Jane (Rowland) Clapp**, born in Clarksfield, Ohio, Feb. 18, 1845; both killed in Taku, Shensi province, China, July 31, 1900. Mr. Clapp was graduated at Oberlin in 1879, and at the Theological Seminary in 1884. Mrs. Clapp was graduated at Lake Erie Seminary, Painesville, Ohio. They sailed for China Sept. 2, 1884, and they visited this country on a furlough in 1894.

Clark, Jonas Gilman, philanthropist, born in Hubbardston, Mass., Feb. 1, 1815; died in Worcester, Mass., May 23, 1900. He worked on his father's farm and as an apprentice to the carriage maker's trade, and later he engaged in the manufacture of tinware, and established stores in Lowell and Milford. In 1853 he found it necessary to go to San Francisco to look after his business, and took up, in addition to his hardware business, the shipping of furniture. He made money rapidly, and invested freely in real estate. In 1880 he removed to Worcester. In 1887 he endowed the university at Worcester which bears his name with \$2,000,000. The work of the university has been developed gradually and without ostentation, but its reputation attracts to it yearly many graduates from other universities and colleges. Another institution that owes its existence to his generosity is a fine public building and library in Hubbardston, with property to endow it.

Clark, Lewis Whitehouse, jurist, born in Barnstead, N. H., Aug. 19, 1828; died in Manchester, N. H., May 28, 1900. He was graduated at Dartmouth College in 1850, and was principal of the Pittsfield Academy from August, 1850, till December, 1852. He was admitted to the bar in September, 1852, and began practice in Pittsfield, and later removed to Manchester. He was a member of the Legislature in 1855. He was appointed Attorney-General of the State May 24, 1872, which office he held till August, 1876. May 24, 1898, he was appointed Chief Justice of the Supreme Court, to fill a vacancy. At the time of his death he was United States Commissioner in Bankruptcy. He received the degree of LL.D. from Dartmouth College in 1888.

Clayton, Thomas J., jurist, born in Delaware County, Pennsylvania, in 1826; died in Chester, Pa., Jan. 30, 1900. He was admitted to practice at the bar in 1851. In 1874 he was elected presi-

dent judge of the courts of Delaware County, after a bitter campaign, and he was twice re-elected (in 1884 and 1894), holding the office at the time of his death.

Cobb, Silas B., merchant, born in Montpelier, Vt., Jan. 23, 1812; died in Chicago, Ill., April 5, 1900. In 1833 he settled at Fort Dearborn (now Chicago), having worked his way on the Erie Canal to Buffalo, and thence on a schooner. He began work as a carpenter; with his earnings he bought trinkets and traded with the Indians. Later he opened a harness shop and built up a good business, which he sold in 1848. In 1848-'52 he carried on a general leather, boot, and shoe trade. After 1852 he devoted his attention to real estate and local enterprises. In 1855 he became a director in the Chicago Gas Light and Coke Company, and later an officer. He was president of Chicago City Railway, and was largely instrumental in the establishment of the cable railway system in Chicago. He was connected with the Chicago and Galena (now the Chicago and Northwestern) Railroad and the Beloit and Madison Railroad. Cobb Lecture Hall, in connection with the University of Chicago, was erected from a fund of \$150,000 given by him.

Codman, John, sailor, author, born in Dorchester, Mass., Oct. 16, 1814; died in Boston, Mass., April 6, 1900. He entered Amherst College, and was a classmate and life-long friend of Henry Ward Beecher, but left in his junior year, 1833. In 1834 he made his first voyage as ship's clerk aboard an East Indian. He passed through all grades from apprentice to master, receiving his first command in 1841. He afterward made many voyages to all parts of the world, and commanded many vessels. He commanded the Indianaman on which Adoniram Judson and his second wife were returning to the United States in 1845 because of Mrs. Judson's health, and detained his ship some time at St. Helena that she might die on land instead of at sea. During the Crimean War he was in command of the transport William Penn, carrying troops from Constantinople to the Crimea. During the civil war he commanded the steamer Quaker City, which was engaged in carrying stores to Port Royal. He left the sea in 1864. In later years he was chiefly known through his advocacy of free trade and free ships. He contributed many articles on these subjects to papers and magazines, wrote on the Mormon question, and was the author of several books of travel. His best known books are *Sailors' Life and Sailors' Yarns*; *An American Transport in the Crimean War*; *Winter Sketches in the Saddle*; *Ten Months in Brazil*; *The Round Trip*; *Free Ships*; *Restoration of the American Carrying Trade*; and *The Mormon Country*.

Conklin, Jennie Maria Drinkwater, author, born in Portland, Me., April 14, 1841; died in New Vernon, N. J., April 28, 1900. She was educated at the public schools of her native place, and at Greenleaf's Institute, Brooklyn. March 17, 1880, she married the Rev. Nathaniel Conklin, for many years pastor of the Presbyterian Church of New Vernon. She was the originator of the "Shut-In" Society, a bureau of correspondence for invalids, which has a large membership and publishes *The Open Window*. As a writer of books for girls and for the religious press Mrs. Conklin was most widely known. She published the following books: *Marion's Little Sister*; *Penny Saved and Penny Earned*; *Only Ned* (New York, 1872); *Not Bread Alone* (1873); *Fred and Jeanie* (1875); *Tessa Wadsworth's Discipline* (1879); *Rue's Helps* (1880); *Electa* (1881); *Bek's First Corner* (1883); *Fifteen* (1883); *Keenie's To-*

morrow (Boston, 1883); *Miss Prudence* (New York, 1883); *Wildwood* (Philadelphia, 1884); *David Strong's Errand* (1884); *Story of Hannah* (New York, 1885); *Fairfax Girls* (Philadelphia, 1886); *That Quisset House* (New York, 1886); *Uncle Seth's Will* (Philadelphia, 1886); *Isobel's Between Times* (New York, 1887); *Rizpah's Heritage* (1887); *From Flax to Linen* (1888); *Fourfold* (1889); *Marigold* (1889); *Other Folk* (1890); *Second Best* (Boston, 1891); *Dorothy's Islands* (1892); *My Lady* (1892); *Looking Seaward* (1893); *Growing Up* (1894); *Three Women* (1894); *Three and Twenty* (1895); *Dolly French's Household* (Philadelphia, 1896); *Paul French's Way* (Boston, 1896); and, with Ella Drinkwater, *Set Free* (1891).

Conrad, Victor Lafayette, journalist, born in Pine Grove, Pa., Oct. 7, 1824; died in Philadelphia, Jan. 7, 1900. He was graduated at Gettysburg in 1851, was licensed to preach by the East Pennsylvania Synod in the same year, and subsequently was ordained. In 1852 he assumed editorial charge of the Evangelical Lutheran at Springfield, Ohio. In 1856 he became principal of a public school at Pittsburg, Pa.; in 1857 he took charge of Cooper Seminary for young ladies at Dayton, Ohio; from 1867 to 1870 he was Professor of Natural Sciences in Pennsylvania College, Gettysburg, Pa.; and in 1870 he removed to Philadelphia to assume the duties of associate editor, with his brother, Frederick W. Conrad, of the Lutheran Observer, which he held to the end of his life. The degree of D. D. was conferred on him by Wittenberg College, Springfield, Ohio. He was a ready writer and an able editor.

Cook, Clarence (Chatham), author and critic, born in Dorchester, Mass., Sept. 8, 1828; died in Fishkill Landing, N. Y., June 2, 1900. He was graduated at Harvard in 1849; studied architecture, and for a time was a teacher. He first drew public attention by the publication in the New York Tribune, in 1863, of a series of criticisms on American art. He was the Paris correspondent of that paper from 1869 till the breaking out of the Franco-Prussian War, when, after a short period of travel in Italy, he returned home. He renewed his connection with the Tribune, and soon created excitement in art circles through his vigorous attack on the genuineness of the Cypriote statues in the Cesnola collection in the Metropolitan Museum of Art, characterizing them as "a fortuitous connection of unrelated parts." The controversy led to legal proceedings, and was the cause of a great deal of bitter feeling. He published a monograph on the Central Park of New York (1868); *The House Beautiful* (1878); supplied the text to accompany a heliotype reproduction of Dürer's *Life of the Virgin* (1874); edited and furnished notes to a translation of the seventh edition of William Lübke's *History of Art* (1878); and for a time he was editor of *The Studio*.

Courtney, Edna (Mrs. James H. Caldwell), actress, born in Washington, D. C., Feb. 26, 1866; died in New York city, March 16, 1900. She made her first appearance at Trenton, N. J., June 1, 1882, in *The Passing Regiment*, as a member of Augustin Daly's company. In the following season she played in various traveling companies the parts of Pauline in *The Lady of Lyons*, Grace Roseberry in *The New Magdalen*, Dolly Dutton and Clara in *Hazel Kirke*, Nora in *Esmeralda*, Edith in *Young Mrs. Winthrop*, Daphne in *The White Slave*, and Nakehira in *Around the World in Eighty Days*. The season of 1883-'84 she played with success the part of Olive Skinner in H. C. Miner's *Silver King* company. In May,

1884, she played Minnie in William Mestayer's production of *Madame Piper* at Wallack's Theater, New York. In August of the same year she played a leading part in a grand production of *The Seven Ravens* at Niblo's Garden. During 1887-'88 she was leading woman in Crossen's *Banker's Daughter* company. Her last appearance was at the Windsor Theater, New York, in a drama called *Rookwood*, in 1889.

Cowell, Anna (Mrs. Anna Cruise Cowell Hobkirk), actress, born in Belfast, Ireland, April 3, 1824; died near Philadelphia, Pa., Nov. 12, 1900. She was a niece of the Irish composer Balfe, and made her *début* as a singer, at the age of thirteen, in Glasgow, Scotland. She married in April, 1846, William Cowell, with whom she came to America immediately afterward, and made her first appearance as *Rosalind* in *As You Like It* at the National Theater, New York, in June of that year. Her success was instant, and she was engaged soon afterward as the leading woman of the Adelphi Theater, Boston. She remained at that house two seasons, and then went to the National Theater of the same city, where she played until the place was burned, in 1852. She was then known to the public as Anna Cruise, and was a petted favorite with the people of Boston. She was engaged for the Federal Street Theater, and continued her career in Boston until that house was destroyed by fire, when she became the leading actress of the Arch Street Theater, Philadelphia, where she played all the Shakespearean heroines with Edwin Forrest and other tragedians. She returned to Boston in 1854-'55 as leading woman of the Boston Museum, and at the end of the season became a star in a play called *The Governor's Wife*. In 1864 she became the leading actress of McVickar's Theater, Chicago, where she remained for many years. After Mr. Cowell's death, in 1868, she remained a widow for several years, but finally married Mr. Hobkirk, a banker, and retired from the stage.

Cox, Jacob Dolson, lawyer and soldier, born in Montreal, Canada, Oct. 27, 1828; died in Magnolia, Mass., Aug. 4, 1900. He spent his childhood and youth in New York city, which was the home of his parents. When about twenty years of age he removed to Ohio. He was graduated at Oberlin College in 1851, and in 1852 began to practice law in Warren. In 1859 he was elected as a Republican to the State Senate, of which body he was a member at the outbreak of the civil war. He was commissioned a brigadier general of volunteers, and saw much service during the war. He was ordered with his brigade to West Virginia, and placed in command of the district of Kanawha. Here, under command of Gen. Rosecrans, his brigade did effective service. Subsequently he was assigned to the 9th Corps, and participated in the battles of South Mountain and Antietam, commanding the corps after the fall of Gen. Reno. For his services in this campaign he was made major general. In the Atlanta campaign he commanded a division of the 23d Army Corps, and later the entire corps. He took part in the battles of Franklin and Nashville, and afterward was ordered to the coast to open communication with Gen. Sherman in his march to the sea. In this effort he defeated Gen. Bragg, with great loss to the Confederate forces, at Kingston, N. C. After the war he superintended the mustering out of the troops in Ohio, and while so engaged he was elected Governor of the State, in 1865, by the Republican party. He opposed the party policy on the question of negro suffrage, and favored forcible colonization; he

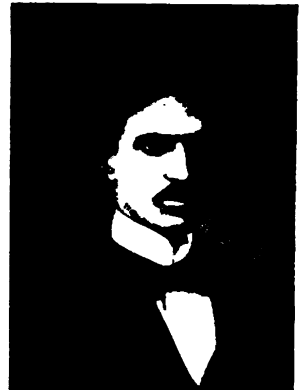
also supported President Johnson, and as a result was not renominated. President Johnson offered him the post of Commissioner of Internal Revenue, but he declined it. He presided at the national convention that nominated Gen. Grant in 1868, and was Secretary of the Interior in 1869-'70, when he resigned to resume the practice of law in Cincinnati. In 1873 he became president of the Wabash Railroad, and made his home in Toledo till 1876, when he was elected to Congress. He was dean of the Cincinnati Law School from 1881 till 1897, and was for a time president of Cincinnati University. The degree of LL. D. was conferred on him by the University of North Carolina and by Davison University. He published *Atlanta* (New York, 1882); *The March to the Sea: Frankfort and Nashville* (1882); *The Second Battle of Bull Run, as Connected with the Fitz John Porter Case* (Cincinnati, 1882); *The Battle of Franklin, Tennessee, November 30, 1864* (New York, 1897); and *Military Reminiscences of the Civil War* (2 vols., New York, 1900).

Coyne, Gardiner (Henry Andrew Gardiner), actor, born in Dublin, Ireland, in October, 1839; died there April 7, 1900. He was a cousin of John Drew the elder, and came to the United States when a boy. His first appearance was at the Museum, Troy, N. Y., in 1850, and for three years he was a member of the stock company of that house. In the spring of 1854 he became a member of the Arch Street Theater company, Philadelphia, then under his cousin's management. His first part was Herbert Carol in *The Wandering Minstrel* (Feb. 28, 1854), and his success was such that after a short engagement he went before the public as a star, jointly with his sister Mary Anne Gardiner. They were the original Irish Boy and Yankee Girl. In 1862 he retired with a competence and returned to Dublin, where he remained until his death.

Crane, Stephen, author and journalist, born in Newark, N. J., Nov. 1, 1871; died at Badenweiler, Germany, June 5, 1900. He was the son of a Methodist clergyman, and after studying at Lafayette College and Syracuse University engaged in newspaper work at the age of sixteen.

He first attracted attention by *The Black Riders*, and *Other Lines*, a volume of eccentric verse, issued in 1895, and followed this the next year with *The Red Badge of Courage*, a story that met with great success, and made him one of the most popular of the younger American writers. In 1895 he made a journalistic tour of Mexico, and he

was a special correspondent of the *New York Journal* during the Greco-Turkish War of 1896-'97. On his way to Cuba in 1897 he was shipwrecked, but was rescued after a perilous voyage in an open boat. In 1898 he went to Cuba as a special correspondent of the *New York World*, to observe the Spanish-American War, and after that he made his home principally in England. His literary work displays much willfulness in the matter of form, as well as occasional carelessness in composition, but he possessed real talent, and had appar-



ently outgrown some of his early faults of style. He is best known by *The Red Badge of Courage*, but in the *Whilomville Stories*, published after his death, he is seen to much better advantage. In these stories of child life the interpretation of the child's attitude toward his surroundings is most faithfully as well as sympathetically depicted. Other works of his not already mentioned are: *Maggie: A Girl of the Slums* (1896); *George's Mother* (1896); *The Little Regiment*, and *Other Episodes of the American Civil War* (1896); *The Third Violet* (1897); *War is Kind*, a book of verse (1898); *The Open Boat* (1898); *The Eternal Patience* (1898); *Wounds in the Rain*, war stories (1900); *Great Battles of the World* (1901).

Cravath, Erastus Milo, clergyman, born in Hanover, N. Y., July 1, 1833; died in St. Charles, Minn., Sept. 4, 1900. He was graduated at Oberlin College in 1857, and at its department of theology in 1860, and settled at Berlin Heights, Ohio, as pastor of the Congregational Church. In June, 1863, he was appointed chaplain of the 101st Ohio Volunteer Infantry, and he served in the Atlanta campaign and in the battles of Franklin and Nashville. He was mustered out of the service in June, 1865. Shortly after the war Mr. Cravath received the appointment of field agent for the American Missionary Association, and was sent to open schools in the central South, accompanied by the Rev. E. P. Smith, secretary of the American Missionary Association in Cincinnati, and reached Nashville, Oct. 3, 1865. At that time Gen. Clinton B. Fisk was stationed in Nashville as Commissioner of the Freedmen's Bureau for Tennessee and Kentucky, and had with him Prof. John Ogden as his superintendent of education. Cravath, Smith, and Ogden purchased, on their own responsibility, a block of land on which stood a large hospital erected by the Government for war purposes. Gen. Fisk was heartily in sympathy with the movement, and secured the transfer of the hospital from the War Department to the Freedmen's Bureau for educational purposes, and the new enterprise, opened Jan. 9, 1866, was named Fisk School. Prof. Ogden became its principal, and Mr. Cravath assumed the general business responsibility. The American Missionary Association and the Western Freedmen's Aid Commission bought the land of Ogden, Smith, and Cravath, and united in sending a corps of 20 teachers for the 1,000 children that were gathered into the school. In July, 1866, Secretary Smith was called to New York, and Mr. Cravath was appointed to the secretaryship in Cincinnati, and had charge of the collecting of funds in Ohio, Indiana, and eastern Michigan, and of school and church work in Kentucky, Tennessee, and northern Georgia and Alabama. In September, 1870, he became field secretary of the American Missionary Association, in New York city, and had charge of the whole work of the association in the South. In July, 1875, he resigned the secretaryship on being elected first president of Fisk University. For three years he managed the tour of the original Jubilee Singers through Europe to raise funds for enlarging the university. He returned in the summer of 1878, and from that time till his death devoted himself entirely to the university.

Cropsey, Jasper Francis, landscape painter, born in Rossville, Staten Island, N. Y., Feb. 18, 1823; died in Hastings-on-Hudson, N. Y., June 22, 1900. He studied architecture five years, and after abandoning that profession was for a time a pupil of Edward Maury, the landscape painter. From 1847 till 1855 he studied in Italy and traveled in Europe. After two years' residence in

the United States he went to London, where he remained seven years, sending many of his pictures to the Royal Academy and to the International Exhibition of 1862. He returned finally to New York city in 1863, and in 1885 removed his studio to Hastings-on-Hudson. Mr. Cropsey was made a member of the National Academy in 1851, and he was one of the original members of the American Water Color Society. He designed the stations for the Sixth Avenue system of the Manhattan Elevated Railway. As an American artist he is classed with the "old" or "Hudson River school" of painters. His best known pictures are: *Jedburgh Abbey*; *Pontine Marshes* (1847); *Backwoods of America* (1857); *Richmond Hill—Midsummer* (1862); *Greenwood Lake* (1870); *Lake Nemi, in Italy* (1879); *Old Church at Arreton, Isle of Wight* (1880); *Warwick Castle*; *Ramapo Valley* (1881); *Autumn on the Hudson* (1882); *Wawayanda Valley* (1883); *Springtime in England* (1884); *October in Ramapo Valley* (1885); *Autumn on Lake George*; *Anne Hathaway's Cottage*; and *A Showery Day*.

Culberson, David Browning, lawyer, born in Troup County, Georgia, Sept. 29, 1830; died in Jefferson, Texas, May 7, 1900. He was educated at Brownwood, La Grange, Ga., and studied law. In 1856 he removed to Texas, and in 1861 settled in Jefferson. He was elected to the State Legislature in 1859, serving till the civil war broke out. He entered the Confederate army as a private, and was promoted to the rank of colonel of the 18th Texas Infantry. In 1864 he was made Adjutant General of the State of Texas, with the rank of colonel, and in the same year was elected to the Legislature. At the expiration of his term he resumed his law practice in Jefferson. In 1873 he was elected State Senator. He resigned in the following year, and was elected to Congress and re-elected continuously till 1896. He was for many years a member of the Judiciary Committee, and for a long time its chairman. He was tendered a place on the Interstate Commerce Commission by President Harrison, but declined it.

Cushing, Frank Hamilton, ethnologist, born in Northeast, Pa., July 22, 1857; died in Washington, D. C., April 10, 1900. He spent his boyhood on a farm in Barre, N. Y., and there became interested in the collection of Indian relics. When he was eighteen years of age his work was brought to the attention of the late Prof. Baird, secretary of the Smithsonian Institution, who in 1875 called young Cushing to Washington to be an assistant in that institution. He had charge of the Smithsonian ethnological exhibit at the Centennial Exposition of 1876, and in 1879 he was sent with an expedition to investigate the pueblos of New Mexico. At his own request he was left at the Pueblo of Zufi. He was adopted into the Zufi tribe, learned their language, and was initiated into a secret order of medicine men, known as the Priesthood of the Bow. His researches gave him a more intimate knowledge of the life and customs of the Indians than had been gained by any one up to that time. In 1884 he returned to Washington and began the elaboration of his notes, but was interrupted by his appointment, two years later, to the directorship of the Hemenway Southwestern Archaeological Expedition. Excavations were made in southern Arizona and New Mexico, covering a period of two and a half years, with the most gratifying results. The greater part of the collection made by this expedition is in the Peabody Museum, Cambridge, Mass. Mr. Cushing then returned to Washington to supervise the

publication of a memoir on the Zuni myths, printed by the Bureau of Ethnology. He directed the expedition fitted out by Mrs. Phoebe A. Hearst and Dr. William Pepper, sent in 1896, under the auspices of the National Museum Bureau of Ethnology and the University of Pennsylvania, to investigate the remains of the prehistoric peoples of the key islands of the Florida coast, which resulted in the collection of many remarkable objects, and in the publication of a preliminary report of Mr. Cushing's researches. The complete account was still in manuscript at the time of his death.

Da Costa, Jacob Mendez, physician, born in the island of St. Thomas, West Indies, Feb. 7, 1833; died in Villa Nova, Pa., Sept. 11, 1900. He was graduated at Jefferson Medical College, Philadelphia, in 1852. He passed two years in the schools and hospitals of Paris and Vienna, after which he returned to Philadelphia, in 1854, and began the practice of medicine, making a specialty of heart and lung diseases. In 1864 he was appointed lecturer on clinical medicine in Jefferson College, and in 1872 was made Professor of the Theory and Practice of Medicine. He contributed to medical periodicals and published the following books: *Epithelial Tumors and Cancers of the Skin* (Philadelphia, 1852); *An Inquiry into the Pathological Anatomy of Acute Pneumonia* (1855); *The Physicians of the Last Century* (1857); *On Serous Apoplexy* (1859); *Medical Diagnosis, with Special Reference to Practical Medicine* (1864); *Inhalations in the Treatment of Diseases of the Respiratory Passages* (1867); *On Strain and Overaction of the Heart* (Washington, 1874); and *Harvey and his Discovery* (Philadelphia, 1878).

Dame, Harriet Patience, army nurse, born in Barnstead, N. H., July 5, 1815; died in Concord, N. H., April 24, 1900. With her parents she removed to Concord in 1843, and, with the exception of a short time spent in the West, resided there till the



outbreak of the civil war. She opened her house in that city as a hospital for the sick volunteers who came from all parts of the State. When the 2d New Hampshire Regiment was ordered to Portsmouth to be mustered into service she insisted on going with it, so that she might continue the work she had begun, and when the regi-

ment finally went South she accompanied it, despite the protests of Gov. Berry. She was under fire at Fair Oaks, and at the second battle of Bull Run she was taken prisoner by the Confederates, but was passed through the lines on account of her services to the men of both armies. Aug. 15, 1862, she was placed in charge of all supplies for sick soldiers sent from New Hampshire. She was at the battle of Gettysburg, and the week following she organized the New Hampshire Soldiers' Relief Association; later she was sent to Charleston to investigate the sanitary condition of the New Hampshire troops stationed there. In the spring of 1864 she took the field with the Army of the James, and had charge of the field hospital at Broadway Landing on the Appo-

mattox. After the war she returned to Washington, and in 1867 was appointed to a clerkship in the Treasury Department, which she held till 1895. She was president from its organization of the Army Nurses' Association, and was also a member of the Woman's Relief Corps.

Davidson, Thomas, philosopher, born in Aberdeen, Scotland, Oct. 25, 1840; died in Montreal, Canada, Sept. 14, 1900. He was graduated at the University of Aberdeen in 1860, as first graduate and Greek prizeman, and till 1863 he was rector of the Grammar (Latin) School of Old Aberdeen. He spent the following three years teaching in various schools in England and Scotland, and during his vacations studied and traveled extensively on the Continent. In 1866 he removed to Canada to accept a professorship in the London Collegiate Institute, and in 1867 came to the United States, spending some months in Boston, and finally settling in St. Louis as classical master of the St. Louis High School. He was afterward principal of one of the branch high schools in that city. In 1875 he removed to Cambridge, Mass., and thereafter made that city his home while in the United States. He traveled and studied extensively in Europe. His interest in Thomas Aquinas led to an invitation from the Pope to settle in Italy and to assist his professors in the preparation of a new edition of that philosopher. He was interested in many philanthropic and educational movements, and was the founder of the Glenmore School for Culture Sciences at Keene, in the Adirondacks. Prof. Davidson was the author of many pamphlets and magazine articles, and was widely known as a lecturer on history, philosophy, and archæology. He also published *The Fragments of Parmenides* (1869); *The Origin of Language*, from the German of W. H. J. Bleek (1869); *A Short Account of the Niobe Group* (1874); *The Philosophical System of Antonio Rosmini-Serbatì*, translated, with a sketch of the author's life, bibliography, introduction, and notes (1882); this work first introduced Rosmini to English readers, and he also translated Rosmini's *Psychology* and his *Anthropology*; *The Parthenon Frieze, and Other Essays* (1882); *Giordano Bruno, and the Relation of his Philosophy to Free Thought* (1886); *The Place of Art in Education* (1886); *Handbook to Dante* (1887); *Aristotle, and Ancient and Modern Educational Ideals*; *Prolegomena to Tenneyson's In Memoriam*; and *The Education of the Greek People, and its Influence on Civilization*.

Davis, Charles Lindley, actor, born in Baltimore, Md., Oct. 1, 1852; died near Pittsburg, Pa., March 1, 1900. He came of a family of actors, and first appeared in public as a baby in short clothes. In his boyhood he was a business manager of theaters, beginning with the Baltimore Museum in 1869. He managed successively the Odeon, Baltimore; the Theater Comique, Providence, R. I.; the Capital Theater, Hartford, Conn.; and the Metropolitan Theater, New York city. In all these he appeared from time to time as a singing comedian. In 1880 he wrote and produced a comedy of New England rural life, entitled *Alvin Joslin*. He became at once a great favorite with the humbler audiences in the portrayal of the farmer Alvin Joslin, and was oftener referred to by the name of that character than by his own. During the rest of his life he played nothing else, except for a brief period, when he produced another play from his own pen, called *One of the Old Stock*. He made a handsome fortune, and in 1891 built the Alvin Theater in Pittsburg, which has ever since retained its rank as one of the finest houses of the drama in the world. He

retired from the stage in 1882. His last appearance was at his own house in Pittsburg, as Alvin Joslin, in June, 1882.

Davis, Cushman Kellogg, lawyer, born in Henderson, N. Y., June 16, 1838; died in St. Paul, Minn., Nov. 27, 1900. He removed with his parents to Waukesha, Wis., and studied at Carroll College, in that town. He was graduated at the University of Michigan in 1857, studied law, was admitted to the bar in 1859, and began to practice in Waukesha. At the outbreak of the civil war he assisted in raising a company for the 28th Wisconsin Volunteers, with which as lieutenant he joined the Army of the Tennessee. Later he served as assistant adjutant general on the staff of Gen. Gorman. He was compelled to leave the army in 1864 by an attack of typhoid fever. In 1865 he went to Minnesota and resumed the practice of law in St. Paul. He was elected to the Legislature in 1867. In 1868 he was appointed United States District Attorney for Minnesota, serving till 1873. In that year he was elected Governor of the State on the Republican ticket. He was an unsuccessful candidate for United States Senator in 1875, and again in 1881, but on Jan. 18, 1887, was elected to the office; and he was re-elected in 1893 and 1899. As chairman of the Committee on Pensions he was the author, in 1890, of the pension act that ended the demand for excessive pension legislation; as chairman of the Committee on Foreign Relations he reported to the Senate, April 13, 1898, the resolutions which were a practical declaration of war against Spain. In August, 1898, he was appointed a member of the Spanish-American Peace Commission. He received the degree of LL. D. from Michigan University in 1886. He was a deep student of French and English literature, and possessed a library rich in Napoleoniana and Shakespeariana. He published *The Law in Shakespeare* (St. Paul, 1884). See portrait in *Annual Cyclopædia* for 1898, page 772.

Davis, Francis W., a missionary of the American Board, born in Sparta, Wis., Sept. 8, 1857; killed in Taku, Shensi province, China, July 31, 1900. He was graduated at Oberlin College in 1889, and went to China the same year.

Detweiler, Isaac C., physician, born in Maxatawny, Pa., in 1830; died in Reading, Aug. 29, 1900. His ancestors were among the pioneer settlers of Pennsylvania. He made a fortune in early life as a builder, and the income from his wealth as well as that from his medical practice he devoted to charity and the Church. During the Spanish-American War he contributed large sums of money for the purchase of literature for the American troops.

Dewey, Justin, jurist, born in Alford, Mass., June 12, 1836; died in Springfield, Mass., March 16, 1900. He received his early education in the public schools, and was graduated at Williams College in 1858. He read law, and in 1860 was admitted to the bar. He was elected to the Massachusetts House of Representatives in 1862, and again in 1877; and in 1879 he was sent to the State Senate and served on the Committee on Probate and Chancery. He was appointed judge of the Superior Court of Massachusetts by Gov. Robinson in 1886, and served with distinction till the time of his death.

Dickinson, Charles Wesley, inventor, born in Springfield, N. J., Nov. 23, 1823; died in Belleville, N. J., July 2, 1900. He was apprenticed to the machinist trade, and early displayed inventive talent. Later he became a watch-case maker, and turned his attention to fine machinery. He perfected a bank-note engraving lathe, and in 1862 the first of his machines was used by the

United States Government. He ran the lathe at Washington for a year and a half, after which he returned to Belleville, where he manufactured his lathe for the United States and many foreign governments. Some of his other inventions were the cycloid attachment to the steel-plate ruling machine, a pantograph tracer, consecutive numbering machines for coupon or railroad ticket numbering, and improved typesetting and type-distributing machines.

Dickinson, Mahlon H., philanthropist, born in Philadelphia, Pa., Aug. 19, 1814; died there, March 23, 1900. He was educated in the schools of the Society of Friends, on leaving which he was apprenticed to the trade of bricklaying. Later he became a builder, and in 1860 retired with a competence. In 1858 he was elected to the City Council of Philadelphia, and in 1859 was chosen a member of the Board of Guardians of the Poor. He was for a time a member of the Republican State Central Committee, and in 1871 was chairman of that body. He was defeated as a candidate for Congress in 1870. He was highway commissioner for many years, and from Nov. 15, 1871, till his death was a member of the Public Building Commission. His most important work was that done as a visitor to the insane asylums and penal institutions of the State. He studied the manner of treating inmates and made reports to the Legislature, the result of which was the enactment of more humane laws for the government of these institutions.

Dorion, Thomas Alfred, clergyman, born in St. Andrews, New Brunswick, March 8, 1849; died in Manchester, N. H., March 30, 1900. He was educated in the academy and college of Pointe aux Trembles, Quebec, and he founded and edited a newspaper in St. Andrews. In 1877 he was licensed as a local preacher in the Methodist Church of Canada, and after four years of theological studies he was ordained. He held charges in Longueuil, Danville, and Sherbrooke, Canada, and in Ware, Mass. From the latter place he went to Manchester, N. H., in 1889, where he founded the French Methodist Episcopal Church, of which he was pastor till the time of his death. He was engaged widely in mission work among the French of Canada and the United States. He founded the only French Sunday-school paper published in America, and was the author of many tracts, books, and pamphlets. The more important titles are *History of the Popes*; *Romanism and the Gospel*; *The Beast: A Study in the Apocalypse*; and *Translations of the Methodist Catechism and Methodist Discipline*.

Dun, Robert Graham, head of a mercantile agency, born in Chillicothe, Ohio, Aug. 7, 1826; died in New York city, Nov. 10, 1900. He was educated at a local academy, and at the age of sixteen was employed in a country store at a salary of \$2 a week. By means of his application and energy he soon became a partner. He went to New York city in 1850, and found employment in the mercantile agency of Tappan & Douglass. There he was steadily advanced, and in 1854, on the retirement of Mr. Tappan, he became a partner of Mr. Douglass, under the firm name of B. Douglass & Co. In 1859 he purchased Mr. Douglass's interest, and since then he had been sole proprietor of the agency, which has come to be an indispensable part of the business world. When he took charge of it only 17 branch offices had been established; this number was increased year by year, till in 1900 there were 150 offices, thoroughly and regularly equipped in as many cities in Europe, Australia, the United States, Cuba, and Mexico. Its rating book is an invaluable

able part of the equipment of every branch of business conducting credit accounts, and its system of reporting credits is one of the most interesting mechanisms of trade. During the past ten years Mr. Dun had not been actively connected with the agency, except in the way of giving advice and in correspondence. He was a constant buyer of paintings, and the walls of his home were covered with pictures. Notable among his collection were *The Marsh*, by Daubigny; *The Admiration of Cupid*, by Bouguereau; and *Pasture bordered by Trees*, by Rousseau.

Dunbar, Charles Franklin, educator, born in Abingdon, Mass., July 28, 1830; died in Cambridge, Mass., Jan. 29, 1900. He was graduated at Harvard in 1851. After leaving college he engaged in business in New Orleans, and afterward in New York and Boston. He was compelled by failing health to retire from active employment, and became a farmer at Lexington, Mass. When he had recovered his health he studied at the Harvard Law School, and in 1858 was admitted to the bar. For several years he had been a regular contributor to the *Boston Daily Advertiser*, and in 1859 he became part owner and editor of that paper in connection with Charles Hale. From 1864 to 1869 he was its sole editor. In the latter year he sold his interest in the paper, and for two years he traveled abroad, returning to Cambridge in 1871, where he was appointed Professor of Political Economy in Harvard University. He held this professorship till the time of his death, serving as dean of the faculty from 1876 till 1882, and on the reorganization of that body as the first dean of the faculty of arts and sciences from 1890 till 1895. He wrote many articles in the discussion of public questions, and was president of the American Economic Association in 1893, and the first editor of the *Quarterly Journal of Economics* from 1886 to 1896. His published works are *The Theory and Practice of Banking and Currency*, Finance, and Banking.

Dutton, Everell Fletcher, soldier, born in Sullivan County, New Hampshire, Jan. 4, 1838; died in Sycamore, Ill., June 8, 1900. His parents settled in Sycamore in 1846, and for eleven years he assisted in his father's store. He studied in Mount Morris, Ill., and in Beloit, Wis., worked on a farm in Kansas for a year, and then returned to Sycamore and served as a deputy clerk till April, 1861. At the outbreak of the civil war he enlisted as first lieutenant in the 13th Illinois Regiment. He was promoted captain, then major, and later to lieutenant colonel, 105th Illinois Volunteers. He was made brigadier general by brevet for gallantry and meritorious service in the campaign in Georgia and the Carolinas, and for distinguished service at the battle of Smith's Farm, North Carolina. He was mustered out June 7, 1865, returned to Sycamore, and in 1868 was elected clerk of the circuit court of De Kalb County, serving eight years. In 1877-'78 he was clerk of the Illinois House of Representatives. In 1878 he was elected clerk of the Supreme Court of the Northern Grand Division of Illinois, which place he held till 1884. In 1883 he became associated with the Sycamore National Bank, and in a short time became its president, which office he held at his death.

Eddy, William Woodbridge, missionary, born in Penn Yan, N. Y., Dec. 18, 1825; died in Beyroot, Syria, Jan. 29, 1900. He was graduated at Williams College in 1845, and taught school in Jacksonville, Ill., two years. He was graduated at Union Theological Seminary in 1850, and in November, 1851, was sent as a missionary to Syria

by the American Board. He spent his earlier years in that country in Aleppo, and later labored at Sidon. In 1878 he settled in Beyroot and became an instructor in the theological seminary in that place. From 1892 he taught in the Suk-el-Ghurb school for boys. He had just finished a complete commentary on the New Testament in Arabic.

Egbert, Henry, artist, born in 1826; died in Brooklyn, N. Y., March 12, 1900. He learned the printing trade, and at the age of eighteen he compiled a set of drawing books, which had a great sale. He was the author of several character sketches—*Moze*, *Lize*, *Apple Mary*, and the *Limekiln Man*—which attracted attention, and were afterward elaborated by Thomas Worth. During the régime of "Boss" Tweed he was the cartoonist for the newspaper known as *The Day's Doings*. He printed in this a cartoon entitled *The Three Disgraces*, which represented Oakey Hall and Peter B. Sweeney supporting "Boss" Tweed. Oakey Hall, who was then mayor of the city, was so enraged that he issued a manifesto and suppressed the paper.

Egleston, Thomas, mineralogist, born in New York city, Dec. 9, 1832; died there, Jan. 15, 1900. He was graduated at Yale in 1854, and was assistant to Prof. Silliman till March, 1855. The next two years he spent in European travel, and then entered the School of Mines in Paris, where he was graduated in 1860. He returned to the United States in 1861, and soon afterward he was appointed curator of the mineralogical collections of the Smithsonian Institution. In 1863 he prepared the plans that were used in establishing a school of mines as a department of Columbia College, and in January, 1864, was chosen Professor of Mineralogy and Metallurgy. He held this chair till 1897, when he resigned on account of failing health, and was made professor emeritus. Prof. Egleston was one of the founders of the American Institute of Mining Engineers, and he was its president in 1886. He was also one of the founders of the American Meteorological Society, and of the Societies of Mechanical Engineers and Electrical Engineers. He was associated with the agricultural and geological survey of the Union Pacific Railroad in 1866, a United States commissioner to examine the fortifications of the Atlantic coast in 1868, and one of the jurors of the International Exposition at Vienna in 1873. He was at the head of several religious and charitable organizations, and rendered New York city a notable service by his efforts for saving Washington Square when it was threatened with obliteration during the Tweed régime. Prof. Egleston published *The Metallurgy of Gold and Silver in the United States* (2 vols.); *A Catalogue of Minerals and their Synonyms*; *Life of Major-Gen. Paterson, of the Revolutionary Army*; and many pamphlets.

Eldridge, George, hydrographer, born in Chatham, Mass., Nov. 27, 1821; died there, Aug. 23, 1900. As a youth he was engaged in fishing. Later he began surveying the shoals near his home, to prepare a chart that would assist in navigating that part of the coast with more safety. He completed valuable charts of the coast from Chesapeake Bay to Belle Isle, and was regarded as an authority on coast navigation; wrote articles on the remarkable tides in the Bay of Fundy; and was the author of a tide book.

Elliot, George H., soldier, born in Massachusetts; died in Marmion, Va., March 23, 1900. He was graduated at West Point, July 1, 1855, and commissioned second lieutenant, 1st Artillery; was transferred to the engineer corps, Jan. 26, 1857,

and was promoted first lieutenant, Aug. 3, 1861; captain, March 3, 1863; major, March 7, 1867; lieutenant colonel, Aug. 8, 1882; colonel, May 18, 1893; and was retired, March 31, 1895.

Elwell, John J., lawyer, born in Warren, Ohio, June 22, 1820; died in Cleveland, Ohio, March 13, 1900. He was graduated at Cleveland Medical College, but afterward studied law and was admitted to the bar. He was elected to the Ohio House of Representatives in 1853. He enlisted in the volunteer army in August, 1861, and served till the close of the civil war. He was four times brevetted for meritorious service, and closed his military career as brevet brigadier general. He was badly injured just before the close of the war and partially disabled. He was an eminent authority on medical jurisprudence, and was the author of *Medico-legal Treatise on Malpractice, Medical Evidence and Insanity* (New York).

Emerson, Joseph, educator, born in Norwalk, Conn., May 28, 1821; died in Beloit, Wis., Aug. 4, 1900. He was graduated at Yale in 1841, and was for a time a tutor there. In 1846 he and his classmate Jackson J. Bushnell were called to Beloit College. For more than a year they constituted the faculty, there being only three students in the college, and no college buildings till 1847. Prof. Emerson held the chair of Greek till the time of his death.

Endicott, William Crowninshield, lawyer, born in Salem, Mass., Nov. 19, 1826; died in Boston, May 6, 1900. He was a direct descendant of John Endicott, first Governor of Massachusetts. He was graduated at Harvard College in 1847, and was admitted to the bar in 1850. He was elected to the Salem Common Council in 1852, and in 1857 became city solicitor. In 1870 he was defeated as a Democratic candidate for Congress, and in 1871 and 1873 was defeated for Attorney-General. In 1873 he was appointed by the Republican Governor, William B. Washburn, a justice of the Supreme Court of Massachusetts, and this office he held till 1883, resigning on account of failing health. In 1884 he was the Democratic candidate for Governor. In 1885 he was appointed Secretary of War, and he served through the term. One of the notable events of his term was his appointment of what came to be known as the Endicott Board on Fortifications, whose elaborate plans have been to a great extent carried out in the defenses of the cities on the Atlantic seaboard. Judge Endicott had a high reputation as a speaker, one of his notable efforts being his oration, in 1878, on the two hundred and fiftieth anniversary of the landing of his ancestor on New England soil.

Everett, Charles Carroll, clergyman, born in Brunswick, Me., June 19, 1829; died in Cambridge, Mass., Oct. 17, 1900. He was graduated at Bowdoin College, and subsequently studied at the University of Berlin. He was librarian at Bowdoin from 1853 to 1857, and was Professor of Modern Languages there in 1855-'57. The next two years he studied at the Harvard Divinity School, and in 1859 he was ordained pastor of the Independent Congregational Church, at Bangor, Me., but he resigned in 1869 to become Bussey Professor of Theology at Harvard University. He was dean of the Divinity School from 1878 until his death. His courses in philosophy at the university were as stimulating as they were highly valued. His latest piece of literary work was a thoughtful paper on James Martineau, in the *Atlantic Monthly* for September, 1900. His published books comprise *The Science of Thought* (1869); *Religions before Christianity* (1883); *Fichte's Science of Knowledge: A Critical Exposition* (1884); *Poetry,*

Comedy, and Duty (1888); *Ethics for Young People* (1891); and *The Gospel of Paul* (1893).

Everett, Erastus, educator, born in Princeton, Mass., Aug. 3, 1813; died in Brooklyn, N. Y., May 7, 1900. He was graduated at Dartmouth College in 1836, and removed to Baton Rouge, La., and subsequently became president of the College of New Orleans. In 1854 he settled in Brooklyn. For several years he was a professor in Rutgers Female College and a lecturer in many educational institutions in New York and New Jersey. He published *A System of English Versification* (New York, 1848).

Fairfax, John Contée, eleventh Lord Fairfax and Baron of Cameron, in the peerage of Scotland, born in Vaucluse, Va., Sept. 13, 1830; died in Northampton, Md., Sept. 28, 1900. He was graduated at Princeton College and at the medical department of the University of Pennsylvania. He was an active practitioner as a physician in his younger days, but in later years lived the life of a gentleman farmer. His right to his title came to him in 1869 on the death of his brother Charles. Although he never assumed his title, it was officially recognized by the court of Great Britain.

Fancher, Enoch L., lawyer, born in Dutchess County, New York, in 1816; died in New York city, Feb. 9, 1900. He was graduated at Wesleyan University and studied law. He was appointed a justice of the Supreme Court in 1872 to fill a vacancy; on the expiration of his term in 1873 he was nominated on the Republican ticket for the succeeding term, but was defeated. In 1874 he was appointed arbitrator of the Chamber of Commerce, the appointment being made under a special act of the Legislature, giving judicial authority to an arbitrator to settle disputes arising among members of the chamber. He was at various times president of the American Bible Society, president of the New York Institute for the instruction of the Deaf and Dumb, and manager of the Missionary Society of the Methodist Church. He published *The American Republic and its Constitutional Government*.

Fox, Junius B., educator, born in Lincolnton, N. C., June 7, 1860; died in Staunton, Va., March 27, 1900. He was graduated at Pennsylvania College, Gettysburg, in 1880; was Professor of Mathematics and Natural Sciences at King's Mountain High School, North Carolina, in 1880-'82; occupied the same chair in Macon School, Charlotte, N. C., in 1882-'84; was pastor at King's Mountain, N. C., in 1881-'82, in Greene County, Tennessee, in 1884-'86; and again Professor of Mathematics and Natural Sciences in Newberry College, South Carolina, from 1886 until a few years ago, when he removed to Virginia. He published *Biography of Rev. A. J. Fox, M. D.* (Philadelphia, 1885); *Experimental Sciences* (1887); *Modern Spiritualism* (1889); *Historical Sketches of the Pastors of the Newberry Lutheran Congregations* (1888); and numerous newspaper and magazine articles.

Frankan, Joseph Griswold, actor, born in New Haven, Conn., in 1854; died in New York city, April 11, 1900. His first appearance was in New York city as a member of the dramatic company supporting Frederic Paulding in the part of Torrelli in *The Fool's Revenge*, at the Lyceum Theater, Feb. 17, 1879. He was engaged by the managers of the Madison Square Theater for the stock company there instituted; and was one of the original cast of *Hazel Kirke*, in which he was the Met. Miggins, Feb. 4, 1880. He played this part several seasons. In January, 1884, he was the original of the part of Bartholomew Jones in *Confusion at the Fifth Avenue Theater*. He

was the original Hiram Sloane in May Blossom at the Madison Square Theater, April 12, 1884, and retained the part for the long run of the play. In April, 1885, he went to the Lyceum Theater and was the first player of Noel in Datolar. In the spring of 1886 he became a member of the company supporting Richard Mansfield, playing with that actor for several seasons in the United States, Canada, and England. He retired from the stage in 1897 and became private secretary to his brother-in-law, Jacob Hess, commissioner of police of the city of New York.

Fritschel, Sigmund, educator, born in Nuremberg, Bavaria, Dec. 2, 1833; died in Dubuque, Iowa, April 26, 1900. He was educated in his native city, and became connected with the Lutheran theological seminary of the Iowa Synod. For several years he served as a missionary in Iowa, Wisconsin, and Michigan, and in 1858 returned to the theological seminary, which had meanwhile been re-established as Wartburg Seminary at St. Sebald, Iowa, and his brother Gottlob had become one of the professors in 1857. He remained in connection with the seminary during the rest of his life, and for many years was its president. In 1860 his synod sent him to Europe to solicit help for its work among the Germans in America. This journey took him as far as St. Petersburg and Moscow. In 1866 he was again sent to Europe to obtain the opinions of Lutheran theologians on the synod's doctrinal position with reference to the predestinarian controversy with the Missouri Synod, and to represent the synod of Iowa at the second anniversary of the Society of Home Missions at Neuendettelsau. In 1870 he was sent to Germany a third time, to secure young men for the seminary and for the rapidly increasing work of missions. In the doctrinal controversies of the Iowa and Missouri synods he took a prominent part, and wrote many of the reports and essays in defense of the position of Iowa. In connection with his brother he edited the *Kirchliche Zeitschrift*, established in 1876, and he also wrote numerous theological articles for periodicals. In 1879 Muhlenberg College conferred on him the degree of doctor of divinity. He and his brother Gottlob (died July 13, 1889; see *Annual Cyclopædia* for 1889, page 630) were for many years the two most influential theologians, educators, and literary workers in the German Iowa Synod. Their books were published in this country and republished in Germany.

Fullerton, William, lawyer, born in Minisink, N. Y., May 1, 1817; died in Newburg, N. Y., March 15, 1900. He was graduated at Union College in 1838, and in 1841 was admitted to the bar. Soon afterward he became district attorney of Orange County. His reputation won for him in 1852 an invitation by Charles O'Connor to remove to New York city and enter into partnership with him. This partnership was dissolved in 1860, and Mr. Fullerton formed the firm of Fullerton, Raymond & Knox, which after several changes became in 1873 Fullerton, Knox & Crosby. Mr. Fullerton was appointed to the Supreme Court bench in 1868, and became *ex officio* a member of the Court of Appeals, in which he sat till the expiration of his term. He was one of the counsel for the defense in the many indictments and civil proceedings against William M. Tweed. The most noted incident in his career was his cross-examination of Henry Ward Beecher in the famous Tilton-Beecher case.

Fulton, Albert Kimberly, dramatist, born in Baltimore, Md., in 1836; died there, Jan. 31, 1900. He was a son of Charles Fulton, editor of the

Baltimore American, and served during the civil war as an engineer in the United States navy. For three years he served on board the Hartford, Admiral Farragut's flagship. At the close of the war he became a member of the editorial staff of the American. He was the author of a libretto of Jack Sheppard, a musical comedy, and a comedy which was very successfully acted by Miss Lotta, called *Mademoiselle Nitouche*.

Galloupe, Dwight, clergyman, born in Stamford, N. Y., in 1871; died in Newark, N. J., July 11, 1900. He was graduated at Alfred University, and studied for two years at the Albany Medical College; he also studied theology at Hobart College and at Harvard University. His first charge was at Angelica, N. Y. Then for two years he was an assistant in the cathedral in Portland, Me. He was appointed rector of St. Paul's Episcopal Church, Newark, N. J., in 1896. He was known as an orator of rare ability. In 1898 he offered his services to the President, and on May 8 was ordered to join the 9th Infantry at Tampa, Fla., as its chaplain. He endeared himself to the men by enduring their hardships, and while assisting the wounded on the firing line in the battle of Santiago he was wounded by a piece of shell, and, although he returned to his duties, he never fully recovered.

Garrison, Lloyd McKim, author, born in Orange, N. J., May 4, 1867; died at Lenox, Mass., Oct. 4, 1900. He was a grandson of William Lloyd Garrison. He was graduated at Harvard in both the academic and the law departments, and was admitted to the New York bar in 1892. He published *Ballads of Harvard and Other Verse* (1891) and *History of the Hasty-Pudding Club* (1897).

Gear, John Henry, merchant, born in Ithaca, N. Y., April 7, 1825; died in Washington, D. C., July 14, 1900. At the age of ten he removed with his parents to Galena, Ill.; two years later to Fort Snelling, Minn.; and in 1843 to Burlington, where he became a clerk in a grocery. In 1849 he was made a partner, and in 1854 became sole owner of the business. In 1852 he was elected alderman, and in 1863 mayor of Burlington. In 1872 he was elected to the Legislature, serving three terms, in the latter two of which he was Speaker of the House. From 1878 till 1881 he was Governor of Iowa. He was elected to Congress in 1886, was twice re-elected, and was defeated on his fourth nomination. He was a member of the Ways and Means Committee that framed the McKinley tariff law. Nov. 19, 1892, he was appointed Assistant Secretary of the Treasury by President Harrison, and in 1894 was elected United States Senator from Iowa; his term would have expired in 1901, and he had been re-elected. At the time of his death he was chairman of the Committee on Pacific Railroads, and a member of the Committees on Agriculture and Forestry, Education and Labor, Interstate Commerce, Post Offices and Post Roads, and Improvements of the Mississippi River.

Gerry, Charles F., author, born in Sudbury, Mass., June 3, 1823; died there, Sept. 4, 1900. He was graduated at Wesleyan University, Middletown, Conn., in 1851, and became a teacher in the Boston Mercantile Academy, and later in the Fort Hill School, Boston. In 1877 and 1880 he was a member of the Legislature. He also served in the State Senate in 1882-'83. He was a frequent contributor to periodical literature, and published *Meadow Melodies* (Boston, 1887).

Gibson, Charles Hopper, lawyer, born in Queen Anne County, Maryland, Jan. 19, 1842; died in Washington, D. C., March 31, 1900. He was

graduated at Washington College, Chestertown, Md.; was admitted to the bar in 1864, and began practice in Easton. In 1869 he was appointed commissioner in chancery, and in 1870 was made auditor of the county. This latter office he vacated the same year to become State's attorney for Talbot County, to which office he was elected for a full term of four years in 1871 and again in 1875. He was elected to Congress in 1885, and served three terms. Nov. 19, 1891, he was appointed United States Senator to fill the vacancy caused by the death of Senator Wilson, and Jan. 21, 1892, was elected for the unexpired term. He served till March 3, 1897, and then returned to the practice of law.

Gilbert, Mahlon Norris, clergyman, born in Laurens, N. Y., March 23, 1843; died in St. Paul, Minn., March 2, 1900. He was educated at Fairfield Seminary and Hobart College, and after preparing for the Episcopal ministry at Seabury Divinity School, in Fairbault, Minn., took orders in 1875. From 1875 to 1881 he was rector of St. Peter's Church, Helena, Mont., and in 1881-'86 rector of Christ Church, Minneapolis, Minn. In October of the last-named year he was consecrated Assistant Bishop of Minnesota, receiving at a later date the title of bishop coadjutor.

Gilder, William Henry, explorer, born in Philadelphia, Pa., Aug. 16, 1838; died in Morristown, N. J., Feb. 5, 1900. At the outbreak of the civil war he enlisted as a private in the 5th New York Volunteers (Duryee's Zouaves). He was transferred as a lieutenant to the 40th New York Regiment, of which his father was chaplain. He served until the close of the war with the Army of the Potomac, and was wounded at Fredericksburg and at Gettysburg. He was commissioned captain in 1864, and brevetted major in 1866. After the war he engaged in artistic and journalistic work. From 1871 till 1877 he was managing editor of the Newark Register. From 1878 till 1880 he served as second in command of the Franklin search expedition, conducted by Lieut. Schwatka, which made a sledge journey in King William's Land lasting twelve months. He acted on this expedition as a correspondent of the New York Herald. In 1881 he accompanied the De Long expedition under Capt. Berry, in the Rodgers, and when that vessel was burned on the western shore of Bering Strait he was assigned to take the news to the nearest telegraph station, which involved a winter journey of nearly 2,000 miles across Siberia. Having accomplished this task, he joined in the search on the Lena delta for the survivors of the Jeannette. In 1882 he was commissioned by the Herald to go on a French war vessel to observe the war in Annam. In 1886 he set out to reach the far north alone and on foot, but was driven back after reaching Point Barrow. He wrote during his later life for various magazines and newspapers. He recorded his arctic experiences in two published volumes—*Schwatka's Search* (New York, 1881) and *Ice Pack and Tundra* (1883).

Glenny, William, soldier, born in Virgil, N. Y., May 31, 1831; died in New York city, Jan. 6, 1900. When a young man he lived for several years in Kansas. Later he returned to his native State, and at the outbreak of the civil war recruited a company at Elmira for the 64th New York Regiment. He was promoted to the colonelcy, and at the close of the war was brevetted brigadier general. At the battle of Fair Oaks he was severely wounded. He was postmaster of Ithaca during President Grant's administration. For twenty-four years previous to his death he was a clerk in the post office in New York city.

Goebel, William, lawyer, born in Sullivan County, Pennsylvania, in 1856; died in Frankfort, Ky., Feb. 3, 1900. With his parents he removed to Covington, Ky., and from that place he went to Cincinnati to learn the jewelry trade. Before completing his apprenticeship he returned to Covington, and entered a law office in 1873. He began practice with the firm with whom he studied, and later became the law partner of ex-Governor John W. Stevenson, and still later of John G. Carlisle. In 1887 he was elected State Senator for Kenton County, and by successive re-elections he continued to represent it in the Legislature till his death. In 1897 he secured the passage of what is known as the Goebel election law, the aim of which was to put the control of State election returns into the hands of election commissioners, who were the appointees of the Legislature, by which control the Democrats hoped to secure the State government. The election commissioners appoint in each county local canvassing boards, who declare the results, which the State Board approves. With this machinery in Democratic hands, Mr. Goebel believed that nothing could defeat the candidates of his party, and he set out to secure the nomination for Governor. He succeeded in obtaining this nomination in June, 1899, after an exciting convention. The result of the campaign that followed was officially declared as follows: Taylor (Republican), 193,714; Goebel (Democrat), 191,331; Brown (Anti-Goebel Democrat), 14,050. Taylor was inaugurated Governor Jan. 12, 1900. Goebel began a contest before a committee of the Legislature, which was Democratic. The committee was to hear arguments before reporting to the Legislature, when Goebel was shot on Tuesday, Jan. 30, by some person unknown, as he was walking to the Capitol. Gov. Taylor, on account of the excitement at the Capitol, adjourned the Legislature to meet in London, Laurel County. The Democratic members tried to hold a meeting, but were shut out of all the public buildings, and finally the members signed a certificate declaring, on the report of the committee, that Mr. Goebel was the duly elected Governor, and he took the oath of office Jan. 31, on his dying bed. The candidate for Lieutenant Governor with him was also sworn in.

Gotwald, Luther A., theologian, born in York Springs, Pa., Jan. 31, 1833; died in Springfield, Ohio, Sept. 15, 1900. He was educated at Wittenberg College, Springfield, Ohio, and at Pennsylvania College, Gettysburg, Pa. He was ordained to the office of the ministry in the Lutheran Church in 1859, and held the following pastorates: At Shippensburg, Pa., 1859-'63; at Lebanon, Pa., 1863-'65; at Dayton, Ohio, 1865-'69; at Chambersburg, Pa., 1869-'74; at York, Pa., 1874-'86; and at Springfield, Ohio, 1886-'88. He was Professor of Practical Theology in Wittenberg Seminary from 1888 till 1895, when he was disabled by paralysis. He published pamphlets on doctrinal and practical subjects, and was a frequent contributor to the periodicals of the Church.

Gould, Annie A., missionary of the American Board, born in Bethel, Me., Nov. 8, 1867; killed in Paoting-Fu, Chi-Li province, China, July 1, 1900. She was graduated, the valedictorian of her class, at Mount Holyoke College in 1892. She joined the North China Mission, in Paoting-Fu, in 1893.

Gould, Ezra Palmer, clergyman, born in Boston, Mass., Feb. 27, 1841; died at White Lake, N. Y., Aug. 22, 1900. He was educated in the Latin Schools of Roxbury and Boston, and served in a Massachusetts regiment during the civil war. At its close he was mustered out with the rank of captain. He then entered the Baptist Theological Seminary at Andover, Mass., and was

logical Institution, at Newton, Mass., and after his graduation, in 1868, became Professor of New Testament Interpretation there, resigning in 1882. After holding the pastorate of a Baptist church in Burlington, Vt., in 1884-'88, he studied for orders in the Episcopal Church, and was ordained in 1891. He was New Testament Professor at the Episcopal Divinity School in Philadelphia until 1898, when he resigned to become assistant minister at St. George's Church, New York city, which post he held at the time of his death. He was the author of *Notes on the Lessons of 1885* (Boston, 1885); *Commentaries on the Epistles to the Corinthians* (Philadelphia, 1887); *The Gospel of Mark* (New York, 1896); and *The Theology of the New Testament* (1900).

Green, Henry, jurist, born in Warren County, New Jersey, Aug. 29, 1828; died in Atlantic City, Aug. 16, 1900. He was graduated at Lafayette College in 1846, was admitted to the bar in 1849, and began practice in Easton. In 1879 he was appointed a justice of the Supreme Court of Pennsylvania, to fill a vacancy, and in 1880 was elected for a full term of twenty-one years. He was the first justice of the Supreme Court of Pennsylvania who went directly from the bar to the bench. He was a member of the constitutional convention of 1873.

Green, William Henry, clergyman, born in Groveville, N. J., Jan. 27, 1825; died in Princeton, N. J., Feb. 10, 1900. He was graduated at Lafayette College in 1840, and for two years was a tutor there. He was graduated at Princeton Theological Seminary in 1846, and he was immediately appointed instructor in Hebrew, and during the following three years was stated supply in the Second Presbyterian Church of Princeton. He was ordained May 24, 1848. He was pastor of the Central Presbyterian Church of Philadelphia in 1849-'51, when he was chosen Professor of Biblical and Oriental Literature in Princeton Seminary. Since 1859 this chair has been designated as that of Oriental and Old Testament Literature. Dr. Green was moderator of the Presbyterian General Assembly in 1891. He was chairman of the Old Testament Committee of the Anglo-American Bible Revision Committee. By virtue of his place as senior professor, he was the official head of Princeton Theological Seminary, and in 1868 was offered the presidency of Princeton College, but declined it. He was a voluminous writer. His best known books are *A Grammar of the Hebrew Language* (1861, and many later editions); *A Hebrew Chrestomathy* (1863); *The Pentateuch Vindicated from the Aspersions of Bishop Colenso* (1863); *The Argument of the Book of Job Unfolded* (1874); *Moses and the Prophets* (1883); *Hebrew Feasts* (1885); *The Unity of the Book of Genesis* (1895); *The Higher Criticism of the Pentateuch* (1895); and *a General Introduction to the Old Testament*.

Grose, William, lawyer, born in Ohio in 1812; died in Newcastle, Ind., Aug. 3, 1900. When three years of age he was taken to the Territory of Indiana. By working in a brickyard he earned money enough to study law. He was originally a Democrat, but in 1854 entered the Republican party. He became colonel of the 36th Indiana Regiment in 1861, and served till the close of the war. He was commissioned brigadier general in 1864, and brevetted major general in 1865. After the war he was assigned to duty as president of a court-martial to try military offenders, and served till December, 1865. In 1866 he was appointed collector of internal revenue for the Fifth District, and he held the office eight years. In 1877 he was a member of the Legislature, and from

1879 till 1883 a State Senator. In 1878 he was defeated as a candidate for Congress.

Grosvenor, William Mason, editor, born in Ashfield, Mass., April 24, 1835; died in Englewood, N. J., July 20, 1900. He entered Yale College in 1855, but left to become editor of the *New Haven Palladium*. At the outbreak of the civil war he enlisted in the 13th Connecticut Regiment, and soon became adjutant. In December, 1862, he was promoted captain. He was shot through the arm at Port Hudson, June 14, 1863, but soon rejoined his regiment. Oct. 29, 1863, he became colonel of the 2d Regiment, Louisiana Native Guards (colored), which he commanded till the close of the war. He returned to New Haven, and was for a time one of the editors of the *Journal and Courier*. In 1866 he took editorial charge of the *St. Louis Democrat*, resigned in 1870, again became its editor in 1872, and finally left it in 1875. In October, 1875, he began editorial work on the *New York Tribune*, which he continued till his death. He wrote on financial and economic topics mainly. In 1885 he began to write weekly articles for *Dun's Mercantile Agency*, and in 1893 he began to edit the weekly *Review*. His published books include *Does Protection Protect?* (New York, 1870); *American Securities* (1885); and *Trades Unions Investigated in the Light of Common Sense* (1885).

Hale, Charles Reuben, clergyman, born in Lewistown, Pa., March 14, 1837; died in Cairo, Ill., Dec. 25, 1900. After graduating at the University of Pennsylvania in 1858, he studied for the Episcopal ministry and was ordained deacon in 1860 and priest in 1861. He was successively assistant minister of All Saints parish, Lower Dublin, Pa., 1861-'63; chaplain in the United States Navy, 1863-'70; rector of St. John's, Auburn, N. Y., 1870-'75; rector of St. Mary the Virgin, Baltimore County, Maryland, 1875-'77; assistant minister of St. Paul's, Baltimore, Md., 1877-'86; and dean of Grace Cathedral, Davenport, Iowa, 1886-'92. In the last-named year he was consecrated bishop coadjutor of the diocese of Springfield, with the title of Bishop of Cairo. He was one of the most learned men in his Church, and was an authority on matters pertaining to the ancient liturgies and similar subjects. He published *Sermons* (1874); *The Mozarabic Liturgy* (1876); *The Universal Episcopate* (1882); and *Speeches and Addresses* (1885).

Hale, Lucretia Peabody, author, born in Boston, Mass., Sept. 2, 1820; died there, June 12, 1900. She was a daughter of Nathan Hale, and the oldest surviving sister of Edward Everett Hale. She was educated at the schools of Elizabeth P. Peabody and George B. Emerson. With the exception of a residence of ten years in Brookline, her entire life was passed in Boston. She served on the Board of School Commissioners, and to her the city is indebted in a great measure for the movement in regard to vacation schools and the teaching of sewing and morals in the public schools. She was also deeply interested in the charitable associations of her city. She contributed many short stories to periodicals, and published the following books: *Seven Stormy Sundays* (Boston, 1858); *The Lord's Supper and its Observance* (1865); *Service of Sorrow* (1866); *Struggle for Life* (1868); *Art Needlework* (1878); *More Sketches in Decorative Embroidery* (1879); *Peterkin Papers* (1880); *Art of Knitting* (1882); *Last of the Peterkins* (1886); *Fagots for the Fireside* (1886); *Stories for Children* (1892). She edited *Plain Needlework* (1878) and *Point Lace* (1879). In collaboration with Mrs. Bernard Whitman she wrote *Sunday-school Stories for*

Little Children; with Edwin Lasseter Bynner, *The Uncloseted Skeleton* (1888); with her brother, Edward Everett Hale, *The New Harry and Lucy* (1892); and with Harriet Beecher Stowe and others, *Six of One by Half a Dozen of the Other*.

Hall, Thomas Winthrop, author, born in Ogdensburg, N. Y., Nov. 13, 1862; died in Hannibal, Mo., Aug. 21, 1900. He was graduated at West Point, June 4, 1887, and was assigned as second additional lieutenant to the 4th Cavalry. He served at Fort Huachuca and San Carlos Agency, Arizona, for a time, and was promoted full second lieutenant of the 10th Cavalry, Oct. 5, 1887; he resigned from the service, Jan. 1, 1889. During the Spanish-American War he was quartermaster of the "Rough Riders," and served with them till Aug. 1, 1898, when he resigned and came home ill with a fever. Under his pen name, Tom Hall, he was well known as a writer of short, bright sketches, poems, and stories; his published works include *When Hearts are Trumps* (Chicago, 1894); *When Love Laughs* (New York, 1897); *Experimental Wooing* (1898); *Little Lady, Some Other People, and Myself* (1898); *When Cupid Calls* (1898); *Fun and Fighting of the Rough Riders* (1899); *Tales* (1899); and *When Love is Lord* (1899).

Hamilton, Louise, actress, born in Havana, Cuba, Nov. 23, 1875; died in London, England, March 3, 1900. She was a daughter of a theatrical family who at the time of her birth were engaged with the Tamberlik Opera Company, then making a tour of the West Indies, and the child made her *début* at the age of three months as the baby Arline in *The Bohemian Girl*. She was for several years a player of children's parts in the Mapleson Opera Company. Her first appearance in drama was in the company of Mr. and Mrs. McKee Rankin when they were playing *The Danites*. In the autumn of 1890 she began a successful four years' tour of the United States as a star in the dual rôle of *Little Nell* and the *Marchioness in Old Curiosity Shop*. Her last appearance was at *The Pavilion*, London, in February, 1900.

Hamlin, Cyrus, educator, born in Waterford, Me., Jan. 5, 1811; died in Portland, Me., Aug. 8, 1900. He was graduated at Bowdoin College in 1834, and at Bangor Theological Seminary in 1837. He was a missionary of the American Board in Turkey from 1837 till 1860, when he became president of Robert College, Constantinople, which he had organized after a seven years' contest with the Turkish authorities. In order to give employment to indigent Armenians, he had introduced the making of bread with hop yeast in Constantinople. During the Crimean War this bread was in great demand, and at its close he had cleared \$25,000, which he applied to the building of churches and schoolhouses. He resigned the presidency of Robert College in 1876, and in 1877 became Professor of Dogmatic Theology in Bangor Theological Seminary. He was President of Middlebury College, Vermont, from 1880 till 1885. In the latter year he retired to Lexington, Mass., where, though superannuated, he remained an agent of the American Board. While at Bowdoin, in 1832, he made the first steam engine built in Maine. He had made a brass screw for Prof. Smith's theodolite, and he asked the professor if he thought he could sell an engine, if he could make one, for as much as he could earn by teaching in the vacation, and the professor encouraged him. Hamlin never had seen an engine, but went to work in a Portland clock-making establishment. In ten weeks he had com-

pleted the engine, and he sold it to Bowdoin College for \$175. He could have earned \$40 by teaching. It was said of Dr. Hamlin that he had 16 professions, every one of which was subordinate to the one great missionary and educational purpose of founding Robert College in Constantinople. He published, in the Armenian dialect, *Upham's Mental Philosophy*; *Arithmetic for Armenians*; and a Turkish translation and critique on the writings of Archbishop Matteos. In English, *Papists and Protestants*; *Cholera and its Treatment*; *Among the Turks*; and *My Life and Times*.

Hammond, William Alexander, surgeon, born in Annapolis, Md., Aug. 28, 1828; died in Washington, D. C., Jan. 5, 1900. He was graduated at the medical department of the University of New York in 1848,

after which he attended a course of clinics in the Pennsylvania Hospital in Philadelphia. July 3, 1849, he entered the army of the United States as assistant surgeon general with the rank of lieutenant, which rank was raised to captain, June 29, 1854. He did duty at various forts and military posts, and acted as medical director of the Sioux expedition and as surgeon to the troops engaged in laying out a road through the Rocky mountains. Oct. 31, 1860, he resigned from the army to become Professor of Anatomy and Physiology in the University of Maryland. At the beginning of the civil war he resigned his chair and re-entered the army. He was appointed assistant surgeon May 28, 1861, and promoted April 25, 1862, to surgeon general with the rank of brigadier general. He instituted many reforms, but became involved in a controversy, was tried by court-martial, and was dismissed from the service Aug. 18, 1864. In 1868 he was appointed Professor of Diseases of the Mind and the Nervous System in the College of Physicians and Surgeons in New York City; subsequently he filled similar chairs in Bellevue Hospital Medical College and in the University of the City of New York. In 1882 he was one of the founders of the New York Post-Graduate Medical School, in which he held the professorship of Diseases of the Mind for years. In the meantime the President and the Secretary of War had been authorized to review the proceedings of the court-martial that had removed him from the army, and on Aug. 27, 1879, he was, after fifteen years of suspension, restored to his former place on the rolls of the army as surgeon general and brigadier general on the retired list. In February, 1888, he abandoned his practice in New York and removed to Washington. He wrote many books on nervous complaints and other medical topics, as well as some novels. His published works are *Physiological Memoirs* (Philadelphia, 1863); *Treatise on Hygiene* (1863); *Lectures on Venereal Diseases* (1864); *A Chapter on Sleep* (1865); *Insanity in its Medico-Legal Relations* (New York, 1866); *Robert Severne: His Friends and his Enemies* (Philadelphia, 1866); *Medico-Legal Study of the Case of Daniel McFarland* (New York, 1867); *Sleep and its Derangements* (Philadelphia, 1869); *Physics and Physiology of Spiritualism* (New York, 1870); *Clinical Lectures on Diseases of the Nervous System* (1871); *Treatise on Diseases of the Nervous System* (1871); *Insanity in its Re-*



lation to Crime (1873); Spiritualism and Allied Causes and Conditions of Nervous Derangement (1876); Cerebral Hyperæmia (1878); Fasting Girls (1879); Neurological Contributions of Studies and Case Records (1879); On Certain Conditions of Nervous Derangement: Somnambulism, Hypnotism, Hysteria, Hysteroid Affections (1881); Dr. Grattan (1884); Lal (1884); A Strong-minded Woman (1885); Mr. Oldmixon (1885); On the Susquehanna (1887); Sexual Impotence in the Male (1886); Sexual Impotence in Male and Female (Detroit, 1887); Spinal Irritation (1888); The Son of Perdition (Chicago, 1898); and with Clara Lanza, Tales of Eccentric Life (New York, 1886).

Harmer, Alfred Crout, merchant, born in Germantown, Pa., Aug. 25, 1825; died there, March 6, 1900. He was educated in the public schools and at the Germantown Academy. He began business as a shoe manufacturer, and later became a wholesale dealer. He was afterward identified with railroad enterprises and mining and land operations. He was elected to the city council of Philadelphia in 1856, and served till 1860, when he was elected recorder of deeds, which office he held three years. He was a delegate to the Republican National Convention that nominated General Grant for President. He was elected to Congress in 1870, and re-elected in 1872 and 1876. He was "father of the House" after the death of Representative O'Neill.

Harnden, Henry, soldier, born in Massachusetts in 1823; died in Madison, Wis., March 17, 1900. He followed the sea several years, and later took part in the Mexican War. He served in the civil war, and on May 6, 1865, was ordered by Gen. Wilson, in command of the 1st Division, Cavalry Corps, of the Army of the Cumberland, to take 150 men and pursue Jefferson Davis and his party, who several days previously had been at Macon, Ga. After a chase of four days he overtook Davis and a number of Confederate officers. During the capture there was by mistake a collision between Harnden's men and a small detachment from the 4th Michigan, which caused the death of two men; each party took the other for Confederates. A congressional investigation exonerated Harnden. At the time of his death he was commander of the Wisconsin department of the Grand Army of the Republic.

Haskell, Thomas Hawes, lawyer, born in New Gloucester, Me., May 18, 1842; died in Portland, Me., Sept. 24, 1900. He was graduated at the Norway Liberal Institute in 1862. In 1862-'63 he served in the National army. He was admitted to the Maine bar in February, 1865, and began practice in Portland in 1866. He was elected in 1884 Associate Justice of the Supreme Judicial Court of Maine. His term would have expired in 1905. Judge Haskell was known as one of the greatest case lawyers in New England. He published Haskell's Reports (2 vols.) and The New Gloucester Centennial (1874).

Hastings, Silas Wright, soldier, born in Franklin County, New York, April 30, 1846; died in Washington, D. C., June 3, 1900. He enlisted in the volunteer army in 1862, and at the close of the war was colonel of the 142d New York Regiment, and had been brevetted brigadier general. He was badly wounded in one of the battles in which he was engaged. After the war he returned to Franklin County, and later he spent some years in California. In 1889 he went to New York city, and became general agent of the Consolidated Coal Company.

Hazen, Henry Allen, meteorologist, born in Serur, India, Jan. 12, 1849; died in Washington,

D.-C., Jan. 23, 1900. He was graduated at Dartmouth College in 1871, and was instructor in drawing in Sheffield Scientific School of Yale University till 1875, becoming Assistant Professor in Meteorology, which chair he held till 1879. May 1, 1881, he went to Washington as computer in the United States Signal Service. In October, 1887, he became one of the regular officers in this department, and made forecasts for the whole country. July 1, 1891, he was made Professor of Meteorology of the Weather Bureau. He devised a system for reducing barometric observations to sea level, a sling psychrometer, and a thermometer shelter. He published Meteorological Tables (1888) and The Tornado (1890).

Healy, James Augustin, clergyman, born in Macon, Ga., Aug. 6, 1830; died in Portland, Me., Aug. 5, 1900. He studied civil engineering, and began its practice, but later turned to the Church, and in 1849 was graduated at Holy Cross College, at Worcester, Mass., at the head of his class. He continued his theological studies at the Grand Seminary, in Montreal, and at St. Sulpice, at Paris. June 10, 1854, he was ordained a priest in the Catholic cathedral of Notre Dame. He returned to the United States, and for a time acted as secretary of Bishop Fitzpatrick in Boston; later he became first chancellor of the diocese of Boston, serving as rector of the cathedral twelve years. In 1866 he became rector of St. James's Church, which place he held nine years. Feb. 12, 1875, he was elected bishop of the diocese of Maine, and he was consecrated June 2, 1875.

Hendrie, John W., philanthropist, born in Sound Beach, Conn., Nov. 18, 1821; died there. Nov. 25, 1900. He was graduated at Yale University in 1851, and in 1854 he went to San Francisco, where he became a merchant and a dealer in real estate. After amassing a fortune in California, he returned to his native town. His principal gifts were \$15,000 to the Mercantile Library in San Francisco and \$10,000 to the Academy of Arts and Sciences of the same city, in 1897; in the same year a gift of \$50,000 to Yale Law School was announced, and later contributions made his gifts to that university double that amount. He also made various liberal gifts to local churches and benevolent institutions.

Hennessy, John, clergyman, born in Limerick County, Ireland, Aug. 20, 1825; died in Dubuque, Iowa, March 4, 1900. In 1847 he removed to Carondelet, Mo., where he studied theology. Nov. 1, 1850, he was ordained a priest, and his first mission was at New Madrid, Mo., where he entered upon his duties, Jan. 20, 1851. A few months later he became pastor of St. Peter's Church, Gravois, Mo., where he remained till 1854. He was then called to the duty of preparing priests for missionary work, being installed in the Carondelet Seminary as vice-president and Professor of Dogmatic Theology and Ecclesiastical History. In 1857 he became president of the seminary. In 1858 he was sent to Rome as representative of Archbishop Kenrick. After his return he officiated a year at the St. Louis Cathedral. Jan. 12, 1860, he became pastor of St. Joseph's Church, at St. Joseph, Mo., remaining there six years. April 24, 1866, he was elected Bishop of Dubuque, Iowa, and Sept. 30, 1866, was consecrated. The diocese of Dubuque was created an archdiocese in 1893, and Sept. 17, 1893, Bishop Hennessy was made archbishop. In 1873 he was instrumental in founding the New Melleray Abbey, and in the same year he founded St. Joseph's College, Dubuque.

Henry, William Wirt, lawyer, born in Red Hill, Charlotte County, Va., Feb. 14, 1831; died in Richmond, Va., Dec. 5, 1900. He was

graduated at the University of Virginia in 1850, and in 1853 was admitted to the bar. Afterward he was district attorney for Charlotte County. In the civil war he served in the Confederate army. He settled in Richmond in 1873. He served four terms in the Virginia Legislature, and was president of the Virginia Historical Society. He filled the same office in the American Historical Association in 1891, and was a trustee of the Peabody Educational fund. In 1876 he delivered the oration at the Philadelphia Centennial; and at the centennial of the laying of the corner stone of the Capitol at Washington, in 1893, he was the orator of the day. In 1898 he was a delegate to the Congress of History at The Hague. He devoted much time and labor to historical researches, and published *The Life, Correspondence, and Speeches of Patrick Henry* (his paternal grandfather); *Patrick Henry, the Earliest Advocate of American Independence: The Rescue of Captain Smith by Pocahontas; The Truth Concerning George Rogers Clark; A Defense of Captain John Smith's Narrative; Sir Walter Raleigh; and many historical papers and addresses.*

Heywood, Joseph Converse, author, born in Cumberland County, Maine, in 1834; died in Rome, Italy, Dec. 19, 1900. He was graduated at Harvard University in 1855, and at the law school three years later. After practicing law in New York city ten years, he devoted himself for a time to dramatic criticism and general literary work, but in 1878 settled in Rome, which continued to be his home henceforth, the famous Torlonia palace there having come into his possession. His writings comprise *Salome, the Daughter of Herodias* (1862), reissued in 1867 as *Herodias*, together with two other dramatic poems, *Antonius and Salome; How Will it End? A Romance* (1872); *How they Strike One, these Authors* (1877); *Sforza: A Tragedy in Verse* (1885); *Lady Merton: A Tale of the Eternal City* (1891); and *Il Nano Italiano: A Libretto* (1892).

Hill, Nathaniel Peter, metallurgist, born near Montgomery, N. Y., Feb. 18, 1832; died in Denver, Col., May 22, 1900. From the age of sixteen he superintended his father's farm for five years. In 1853 he entered Brown University as a student of applied chemistry suitable for agriculture, and he was graduated there in 1856. He remained at Brown as instructor in chemistry, and in 1859 was made professor, which chair he occupied till 1864. In that year he was sent by Boston capitalists to investigate the mineral characteristics of Gilpin County, Colorado; he became interested in the processes of extracting gold and silver from the unworkable ores, and after several trips abroad he organized the Boston and Colorado Smelting Company, and was made its general manager. With an associate (a Mr. Pierce, from Wales), he invented a process of extracting gold and silver from matte which was really the foundation of the great mining industries of Colorado, as previous to this invention all matte had been sent to England. The headquarters of the company were at Black Hawk, Col. In 1871 he was elected mayor of Black Hawk, and in 1872-'73 was member of the Territorial Council. In 1879 he was elected United States Senator. He was an advocate of the free coinage of silver, and spoke frequently on the subject. In 1891 he was one of the three members of the International Monetary Commission, and also served for a time as regent of the Smithsonian Institution. In business life he had been president of the United Oil Company, Colorado Smelting and Mining Company, and Demargo Land Company, and proprietor of the Denver Republican.

Hinckley, Francis Edward, civil engineer, born in Elmira, N. Y., March 14, 1834; died in West New Brighton, N. Y., Sept. 6, 1900. He was graduated at Knox College, and went to Chicago in 1870, where he was engaged in bridge building and railroad undertakings from 1875 till 1890. Later he became president of the Chicago, Pekin and Southwestern Railroad, and acquired large interests in other railroads. He was connected with the Niagara Power and Development Company, and a projector of a large steel company in Canada. He was an incorporator of Chicago University, and a generous contributor to it.

Hinsdale, Burke Aaron, educator, born in Wadsworth, Ohio, March 31, 1837; died in Atlanta, Ga., Nov. 29, 1900. At the age of sixteen he entered Hiram College, where he met James A. Garfield, who was five and a half years his senior, and they became fast friends. Prof. Hinsdale began teaching in the public schools; later he was principal in an academy, and in 1870 he was made president of Hiram College. His presidency of this institution covered a period of twelve years. During this time he published his first books: *The Genuineness and Authenticity of the Gospels* (1872); *The Jewish-Christian Church* (1878); *Ecclesiastical Tradition* (1879). Some of his other papers written at this time were afterward gathered into a volume entitled *Schools and Studies*. From 1882 till 1886 he was superintendent of the Cleveland public schools, and in 1888 he was appointed to the chair of the Science and Art of Teaching in the University of Michigan. His other books are *President Garfield and Education; The Old Northwest; The American Government; How to Study and Teach History; Teaching the Language Arts; Jesus as a Teacher; and Studies in Education*. He edited *The Works of James A. Garfield* (2 vols.).

Hitchcock, Hiram, hotel keeper, born in Claremont, N. H., Aug. 27, 1832; died in New York city, Dec. 30, 1900. He prepared for Dartmouth College at the Black River Academy, Ludlow, Vt., but instead of entering college became an instructor. In 1853, on account of failing health, he went to New Orleans, where he entered the office of the St. Charles Hotel. In 1859, with Paron Stevens and Alfred B. Darling, he opened the Fifth Avenue Hotel, New York. In 1866 he retired from business and traveled extensively in Egypt, Syria, Cyprus, Greece, and Italy. In 1871 he returned to Hanover, N. H., and in the following year announced to the world the famous discoveries of Gen. di Cesnola in Cyprus. He was connected with many learned and scientific bodies, and always took a deep interest in the explorations in Egypt, Palestine, and South America, and in the American School in Athens. In 1877 he represented Hanover in the New Hampshire Legislature. In 1879 he resumed his connection with the Fifth Avenue Hotel. He was trustee and director in many educational and financial institutions, and was president of the company that built the Madison Square Garden in New York. He was president of the Nicaragua Canal Association that obtained the concessions from Nicaragua and Costa Rica, and on the organization of the Maritime Canal Company, in May, 1889, he was elected its president.

Hoadly, Charles Jeremy, librarian, born in Hartford, Conn., Aug. 1, 1828; died there, Oct. 21, 1900. He was graduated at Trinity College in 1851, and was admitted to the bar in 1855, but never practiced law. In 1854 he was appointed librarian of Trinity College, and in April, 1855, was made State Librarian of Connecticut, which office he held until his death. He was the editor

of 16 volumes of the Connecticut colonial records and of Goodwin's Genealogical Notes. In 1889 he was made a doctor of laws by Trinity College.

Hodge, Cortlandt van Besselaer, missionary of the Presbyterian Board, born in Burlington, N. J., July 1, 1872; **Elsie Campbell (Sinclair) Hodge**, born in Cedar Rapids, Iowa, Dec. 15, 1874; both killed in Paoting-Fu, Chi-Li province, China, June 30, 1900. Dr. Hodge was graduated at Princeton in 1893, and at the University of Pennsylvania, medical department, in 1897. Mrs. Hodge was graduated at Bryn Mawr College in 1897. They sailed for China in March, 1899.

Hoffman, James H., philanthropist, born in Sieligenstadt, Bavaria, Nov. 5, 1833; died in New York city, July 8, 1900. He came to America in 1855, having been previously employed by the Rothschilds in Frankfort-on-the-Main, engaged in the manufacture of paper collars, and was the organizer of the Standard Collar Company. He was connected with various manufacturing interests, and was interested in educational and philanthropic organizations. He was a director of the Baron de Hirsch fund, and treasurer and a director of the Borough Homes Company. For fourteen years he served as treasurer of the United Hebrew Charities, resigning a few years ago. The Hebrew Benevolent and Orphan Asylum Society found in him an interested helper. Mr. Hoffman was a trustee of Temple Emanu-El, and twelve years ago he founded the Hebrew Technical Institute, of which he was president at the time of his death.

Hoffman, Wickham, lawyer, born in New York city in 1821; died in Atlantic City, N. J., May 21, 1900. He was graduated at Harvard College in 1842, and practiced law till the outbreak of the civil war. He was appointed aide-camp to Gov. Morgan, and was sent to inspect the New York troops at Fort Monroe. In March, 1862, he entered the volunteer service as assistant adjutant general, and served on the staff of Gen. Williams. He was at the capture of New Orleans, and took part in expeditions to Vicksburg and Baton Rouge. For a time he served on the staff of Gen. Sherman. In 1863 he took part in the expedition to Texas and in the Red river campaign. In 1864 he was appointed assistant adjutant general of eastern Virginia and North Carolina, and in March, 1865, was assigned to duty in New Orleans. In 1865 he was appointed adjutant general and chief of staff to Gen. Canby. In 1866 he resigned, and was appointed assistant secretary of legation at Paris. In 1867 he was made secretary of legation, and he filled the office nine years. He was transferred to London in 1875, and in 1877 to St. Petersburg, where for six years he acted as *chargé d'affaires*. In 1882 he was appointed minister resident and consul general to Denmark; he served till 1884, when he retired to private life. He was the author of *Camp, Court, and Siege* (London, 1877), and *Leisure Hours in America* (1883).

Hovey, Richard, poet, born in Normal, Ill., May 4, 1864; died in New York city, Feb. 24, 1900. After graduation at Dartmouth College he studied at the General Theological Seminary in New York, but abandoned his intention of entering the Episcopal ministry after serving for a short while as a lay assistant. During the remainder of his career he was by turns actor, journalist, and lecturer on English literature. He was a student of the later French and Belgian poets, and published an English translation of Maeterlinck. His verse, much of which is in dramatic form, exhibits unusual promise, each successive effort being a gain upon that which had preceded it. "That his aim was high," writes Mr. Stedman, "is shown even by his failures; and in his death there is no doubt

that America has lost one of her best equipped lyrical and dramatic singers." His works comprise *The Laurel: An Ode* (Washington, 1889); *Launcelot and Guenevere: A Poem in Dramas* (New York, 1891); *Seaward: An Elegy upon the Death of Thomas William Parsons* (1893); *Songs from Vagabondia*, with Bliss Carman (1893); *More Songs from Vagabondia*, with Bliss Carman (1896); *Along the Trail* (1898); *The Quest of Merlin; The Marriage of Guenevere; The Birth of Galahad*, a trilogy, the first two parts of which had appeared in 1891 as *Launcelot and Guenevere* and were now reprinted with some revision and amplifications (1898). *Taliesin: A Masque*, perhaps his most finished effort (1900), and *Last Songs from Vagabondia*, with Bliss Carman (1900), were issued posthumously.

Howard, Samuel, naval officer, born near Dublin, Ireland, in 1828; died in Washington, D. C., Jan. 14, 1900. His parents came to the United States when he was a boy, and settled in Newport, R. I. At the age of sixteen he ran away to sea, and his life for over half a century was spent upon the water. His first voyage was to the Mediterranean, and for several years he was captain of a merchant vessel sailing between New England and points in Cuba and the West Indies. At the outbreak of the civil war he was commissioned a lieutenant in the volunteer navy and placed in command of the gunboat *Neosho*, doing patrol duty on the lower Mississippi. Later he was transferred to the *Amanda* as acting master, to patrol the Atlantic coast south of Norfolk. He reached that port just at the time the *Monitor* came down to battle with the *Merrimac*. The pilot of the *Monitor* having refused to pilot her through Hampton Roads, Lieut. Howard volunteered to undertake the task. He ran the *Monitor*, commanded by Capt. Worden, right up alongside the *Minnesota* in the nick of time, and in the fight with the *Merrimac* which followed Howard was the only man in the conning tower with Capt. Worden, and to him in a great measure was due the successful outcome of the engagement. At the close of the war he resigned from the navy and received a commission as third lieutenant in the revenue marine service. He was stationed for various periods at New Orleans, Savannah, Baltimore, Cedar Keys, and Mobile. He rose to the grade of second lieutenant, but in an examination held in 1891 he was proved physically unfit for promotion, and was placed at the foot of the second-lieutenant grade, out of the line of promotion.

Hoyt, Charles Hale, American dramatist, born in Concord, N. H., July 26, 1860; died in Charlestown, N. H., Nov. 20, 1900. He was graduated at the Boston Latin School, and studied law. He was an appointee to West Point Military Academy, but failed to pass the physical examination. In 1875 he tried stock raising in Colorado, but returned to the East and engaged in journalism on the *St. Albans (Vt.) Advertiser*. He then became a writer for the *Boston Post*, of which he was musical and dramatic critic. While in this place he turned his attention to play writing. His first effort was a sketch called *Gifford's Luck*, which was produced with success at the Howard Athenæum, Boston, in 1882. His next work was a melodrama, *Cezalia*, which also was well received. He then wrote *A Bunch of Keys*, at the suggestion of Willie Edouin and Alice Atherton, and it was first presented by these two comedians at Providence, R. I., but was coldly received. The late Charles W. Thomas, who was an intimate friend of Mr. Hoyt's, liked it, and assisted him to improve it. These two thereafter entered into collaboration, and continued as partners until Mr.

Thomas's death, in 1893. The Bunch of Keys, which had been sold for \$500 to Mr. Edouin and Mr. Frank Sanger, was first played in New York city at the San Francisco Minstrels' Opera House, March 26, 1883, and by its instantaneous success made the fortunes of its owners, the reputation of its inventors, and a new style of American comedy. A Rag Baby was produced in 1884. A Parlor Match, which made Evans and Hoey famous and rich, was first produced at Tony Pastor's Theater, New York, Sept. 22, 1884. Hoyt and Thomas received \$3,000 for this play. A Case of Wine was produced by the late Charles B. Bishop at Austin, Texas, Nov. 10, 1884. A Tin Soldier at the Standard Theater, New York, May 3, 1886, and an opera, called The Maid and the Moonshiner, on Aug. 16, 1886, at the same house. The last was a failure, which Hoyt attributed to the fact that its title did not begin with the article "A," and thereafter all his titles began with that useful part of speech. A Hole in the Ground was first presented at the Fourteenth Street Theater, New York city, Sept. 12, 1887. In the winter of 1887-'88 a serious play, called A Midnight Bell, in which Maude Adams played the heroine, was produced, but the craze for farce which Hoyt and Thomas had created prevented any success of this really well-deserving piece. A Brass Monkey was the next farce, produced May 22, 1888. Then came A Texas Steer, first played April 28, 1890. This play was written for Mr. Hoyt's first wife, Miss Flora Walsh. Sept. 18, 1890, was first produced A Trip to Chinatown, with which the dramatists reached high-water mark. It is said that this farce made for them \$500,000 in five years, and it holds the record for the longest continuous run of any dramatic production in America. In 1893 Miss Walsh died, and in 1894 Mr. Hoyt married Miss Caroline Miskel, who had been playing in A Temperance Town, first produced March 14, 1892. A Milk-White Flag was produced Dec. 23, 1893. After Mr. Thomas's death in this year Mr. Hoyt entered into partnership with Mr. Frank McKee and leased the Madison Square Theater, New York, the name of which was changed to Hoyt's Theater. Hoyt's later works and the dates of their production were: A Black Sheep, Sept. 10, 1894; A Contented Woman, Sept. 2, 1895; A Runaway Colt, Nov. 12, 1895; A Stranger in New York, Feb. 15, 1897; A Day and a Night, April 18, 1898; and A Dog in the Manger, Jan. 30, 1899. The current of public esteem set gradually away from this kind of clever nonsense, and the last-named plays were failures. Mr. Hoyt was twice elected to the Legislature of his native State.

Hubbard, Oliver Payson, physician, born in Pomfret, Conn., March 31, 1809; died in New York city, March 9, 1900. He was graduated at Yale College in 1828. From 1831 till 1836 he was assistant to the elder Prof. Benjamin Silliman in the chemical laboratory of Yale College, and he aided Charles Goodyear in all the early experiments that led to his discovery of the process of vulcanizing India rubber. In 1836 he was appointed Professor of Chemistry, Pharmacy, Mineralogy, and Geology in Dartmouth College, and he filled that chair thirty years. After resigning his professorship he continued his lectures in Dartmouth Medical School till 1883, when he was made professor emeritus. In 1853 he built the Shattuck Observatory. From 1867 till 1895 he was overseer of the Thayer School of Engineering. Prof. Hubbard was a founder of the Association of American Geologists and Naturalists in 1841; also a founder of the American Association for the Advancement of Science in 1848, and its secretary and a vice-

president from 1885 till 1892. After 1874 he resided in New York city. He was a contributor to scientific periodicals, and was the author of the History of the New Hampshire Medical Institution; History of the Chandler School, Dartmouth College (1881); Account of Seven Nineveh Slabs; Biographical Sketches of the Class of 1828, Yale (1898); and College Memorabilia.

Humphreys, Frederick, physician, born in Marcellus, N. Y., March 11, 1816; died at Monmouth Beach, N. J., July 8, 1900. He was educated in the public schools and at Auburn Academy. He served as clerk in a store in Auburn two years, and in 1832 went South for three years. He taught a school three years in Chillicothe, Ohio, and later studied for the ministry in the Methodist Church. He was an itinerant minister five years in New York and Ohio. In 1844 he settled in Utica. In 1846 he began to investigate homœopathy, and he spent the winters of 1848, 1849, and 1850 at the Homœopathic Medical College in Philadelphia, where, in 1853, he became Professor of Homœopathic Institutes and Practice of Medicine, serving four years. For some years he had been maturing a plan for the preparation of homœopathic medicines for popular use, and in 1856 he announced the invention of a number of combinations, which he termed his "homœopathic specifics." In that year he settled in New York city and began to advertise his specifics. He was a constant contributor to Our Animal Friends, and published Proving of the Apis Melliflua, or Poison of the Honey Bee (1852).

Huntington, Collis Potter, railroad builder, born in Harwinton, Conn., Oct. 22, 1821; died at Pine Knot Camp, near Lake Raquette, N. Y., Aug. 13, 1900. He was educated in a local school, and worked on his father's farm till he was fourteen years old. He then set out for himself, and for several years peddled clocks in the small Connecticut towns. In 1837 he went to New York city, and, having procured credit for \$3,000 worth of clocks, went to sell them through the South and West. In 1842 he settled in Oneonta, N. Y., having entered into partnership with his elder brother, and the firm carried on a general merchandise business. In October, 1848, the brothers made a shipment of goods to California, which Collis followed in March, 1849. With others, he was detained on the isthmus, and he improved the time by buying a stock of goods and peddling them back and forth across the isthmus. When he arrived in California he began business in a tent in Sacramento, dealing in the various articles required in mining life. Later he opened a large hardware store in the city, having become associated in business with Mark Hopkins. In 1860 he matured a scheme for a transcontinental railroad, Leland Stanford, Charles Crocker, and Mr. Hopkins having united with him in paying the expenses of a survey across the Sierra Nevada mountains. Five men organized the Central Pacific Railroad Company, of which Mr. Huntington



was vice-president. After Congress had agreed to aid the enterprise by an issue of bonds, he and his associates carried on the construction of the railroad out of their private means till the bonds became available by the completion of a stipulated mileage. The Central Pacific was finished in 1869, the last spike being driven May 10. Having carried through so gigantic a scheme, Mr. Huntington had the confidence of all the great financiers of the country, and was enabled to command unlimited capital in any of his later undertakings. At the time of his death there were merged into the Southern Pacific Railroad Company, of which he had been the promoter and was the president, 26 corporations, with more than 9,000 miles of railroad track and 5,000 miles of steamship line. He had succeeded in completing the Chesapeake and Ohio Railroad, in which many other contractors had been ruined. He turned the village of Newport News, Va., into a thriving town, and had invested more than \$7,000,000 in a shipyard there, which employs thousands of men. He had the reputation of being one of the largest single landholders in the country, holding title to vast tracts of undeveloped land in California, Kentucky, West Virginia, Mexico, and Guatemala, as well as valuable real estate in New York city, and four large hotels. Some of his vast wealth he used in philanthropic ways. In 1886 he erected a massive granite church in his native town, to the memory of his mother. In October, 1891, he gave to the town of Westchester, N. Y., a library and reading room. In February, 1897, he presented to the Metropolitan Museum of Art the celebrated portrait of Washington painted by C. W. Peale. For colored people he aided greatly in the construction and equipment of the Hampton (Va.) Normal Agricultural Institute and the Tuskegee (Ala.) Normal and Industrial Institute; to the latter he gave as an endowment fund \$50,000 on Dec. 6, 1899. His collection of art objects—paintings, carvings, etc.—was worth \$500,000; he left an estate valued at \$35,000,000.

Ingalls, John James, lawyer, born in Middleton, Mass., Dec. 29, 1833; died in Las Vegas, New Mexico, Aug. 16, 1900. He was graduated at Williams College in 1855, and was admitted to the bar in 1857. In October, 1858, he removed to Atchison, Kan. In 1859 he became a member of the Wyandotte Constitutional Convention; in 1860 was made secretary of the Territorial Council, and in 1861 secretary of the Kansas Senate. In 1862 he was elected to the State Senate, and the same year he was the unsuccessful candidate for Lieutenant Governor. After his defeat he became editor of the Atchison Champion, which place he held from 1863 till 1865. He was again defeated as a candidate for Lieutenant Governor in 1864. In 1872 he was elected to the United States Senate, and he served continuously in that body from 1873 till 1891. During the last three years of that time he was president *pro tem.* of the Senate. He gained wide fame as a Senator, his speeches attracting attention throughout the country. When the Farmers' Alliance party had gained control of Kansas, as Senator Ingalls had dealt with that element in anything but a gentle way, he was compelled to retire from public life in 1891. He then devoted most of his time to newspaper work, and traveled about the country as correspondent for a New York paper. He also lectured.

Ingate, Clarence L. A., naval officer, born in Alabama; died in Guam, Ladrones Islands, Dec. 24, 1899. He was graduated at the United States Naval Academy, July 1, 1890, entered the marine corps as second lieutenant, and was promoted first lieutenant, April 30, 1892, and captain, Sept. 26,

1898. He served through the war with Spain, and later was stationed on the receiving ship Vermont in Brooklyn Navy Yard. He was on his way to Manila at the time of his death.

Ingham, Hannah May (Mrs. E. T. Stetson), actress, born at Mokelumne Hill, Cal., in 1867; died in New York city, Jan. 16, 1900. She made her first appearance at the California Theater, San Francisco, as Ophelia, in 1885. She shortly afterward became the wife of E. T. Stetson, an actor of melodramatic plays, who traveled with a company of his own through the Western and Southern States, and with him Miss Ingham played the heroines of his various dramas. Her first appearance in New York was at the Fourteenth Street Theater, as Margaret in The House of Mystery, Sept. 14, 1896. In August, 1898, she appeared as the leading woman of the Murray Hill Theater, New York, where she remained, playing twice a day during the continuance of each theatrical season, until her death. In this time she played a great number of parts in the popular plays of the day, as the practice of the theater was to have a new play every week. She found time to write for periodicals stories and essays and a new version of East Lynne, called The Young Wife, first produced at the Murray Hill Theater, Oct. 3, 1898. Her last appearance was at that theater, Jan. 15, 1900, as Julie de Varion in An Enemy to the King.

Irby, John Laurens Manning, planter, born in Laurens County, South Carolina, Sept. 10, 1854; died in Laurens, S. C., Dec. 9, 1900. He was educated at the University of Virginia and at Princeton University, and was admitted to the South Carolina bar in 1876. The same year he took an active part in the Democratic campaign. He continued in the practice of law till 1879, when he retired to his farm near Laurens and devoted himself to planting on a large scale. In 1878, in a personal quarrel, he killed his opponent, for which he was subsequently tried and acquitted. He served in the South Carolina Legislature from 1886 till 1890, and was Speaker during the latter year. He entered the reform movement as a supporter of Tillman, and was made chairman of the Reform Executive Committee, organized the campaign, and won the victory for Tillman. He was elected United States Senator Dec. 11, 1890, defeating Gen. Wade Hampton by 105 votes against 42, with 10 for M. L. Donaldson. March 14, 1893, he was elected chairman of the Senate Committee on Transportation Routes to the Seaboard. His term, during which he was the youngest member of the Senate, expired March 4, 1897. In the meantime he had quarreled with Tillman, and refused to stand for re-election. On the death of Senator Earle he made a contest, and sustained his first political defeat at the hands of Mr. McLaurin.

Irons, Martin, labor leader, born in Dundee, Scotland, March 1, 1832; died in Bunceville, Texas, Nov. 17, 1900. He came to New York with his parents when fourteen years of age, and learned the trade of machinist. Several years afterward he went to Carrollton, La., where he was foreman in a machine shop. He tried the grocery business in New Orleans, but made a failure of it; and after leaving that city for Frankfort, Ky., he became widely known as an agitator in the movement among railway men for shorter hours. From Frankfort he went to St. Louis, then to Hannibal and Lexington, Mo., speaking to and making the acquaintance of the laboring classes. In the latter place he was also connected with the Granger movement. He organized and led the famous Missouri Pacific strike of 1888.

Mr. Powderly, then the head of the Knights of Labor, was opposed to the strike, and this eventually led to his retirement from the leadership of the organization. Irons entered the contest for the presidency, but failed of election.

Jackson, Henry Melville, clergyman, born in Leesburg, Va., July 28, 1848; died, May 4, 1900. He was educated at the Virginia Military Institute and at the Virginia Theological Seminary, in Alexandria, and after taking deacon's orders in the Episcopal Church, in 1873, he was admitted to the priesthood the next year. He was in charge successively of Montgomery parish, Virginia, and Christ Church, Greenville, S. C., and was rector of Grace Church, Richmond, Va., in 1876-'91. He was one of the editors of the Southern Pulpit, afterward united with the Pulpit Treasury, and for a time was on the editorial staff of the Southern Churchman. In January, 1891, he was consecrated Bishop Coadjutor of Alabama, which office he resigned in April, 1900.

Jessing, Joseph, educator, born in Münster, Westphalia, Nov. 17, 1836; died in Columbus, Ohio, Nov. 2, 1899. He entered the Prussian army at an early age, and attended the royal

military academy. In 1860 he gave up his military studies for an ecclesiastical career, but he returned to the army to serve through the Schleswig-Holstein War of 1864 and the Austrian War of 1866. He then resolved to devote himself to missionary work, and came to the United States. He completed his theological course at Mount St. Mary's of the West, was



ordained, and began his labors in Columbus, Ohio. Afterward he was assigned to the charge of the Sacred Heart Church, in Pomeroy, Ohio. There he began the publication of a journal, entitled *Ohio Waisenfreund*, the profits of which he devoted to the support and education of homeless orphan boys. The venture was very successful, and in 1875 he established an orphan asylum in Pomeroy. Two years later he gave up his parochial charge, and removed to Columbus, where he began at once the work of building up an institution that now covers an entire square and is entitled the *Pontificium Collegium Josephinum de Propaganda Fide*. It has 11 fine buildings, and comprises an orphanage, a house for the Franciscan Sisters, who attend to the domestic duties that arise in connection with the institution, a college for theological training, an industrial school of art, a printing office, and mechanical workshops. Father Jessing also purchased 100 acres near Columbus for farm work, where supplies are raised for the institution. Students who are unable to pay for tuition receive it free. In 1892 the Congregation for the Propagation of the Faith gave the college canonical constitutions, and this action was ratified by Pope Leo XIII. It is also incorporated under the laws of Ohio, and has power to confer degrees. It now has about 170 students. In 1894 Father Jessing was appointed to the dignity of domestic prelate, which gave him the title of Monsignor.

Jones, Alfred, engraver, born in Liverpool, England, April 7, 1819; died in New York city, April 29, 1900. He came to New York in 1824. He apprenticed himself to a firm of bank-note engravers, and when still a young man he was put in full charge of the engraving department. Mr. Jones made many of the best plates used by New York publishers of half a century ago. His first piece of art work to attract attention was *The Proposal*, engraved for *Graham's Magazine*. In 1839 he took a first prize in the New York Academy of Design for a drawing from *Thorwaldsen's Mercury*. *The Proposal* and *The Farmer's Wooing* also took first prizes. In 1846 he went to Europe and spent several months in perfecting himself in engraving. After 1848 he devoted himself almost entirely to bank-note engraving. He designed the 2-cent, 30-cent, 4-dollar, and 5-dollar postage stamps in the Columbian series for the American Bank Note Company. In 1841 he was made an associate and in 1851 a full member of the National Academy of Design, and he was for many years its secretary and treasurer. Among his engravings are *The Image Breaker*, after Leutze, a half-sitting sketch of Adoniram Judson; *William Cullen Bryant*; *The Capture of Major André*, after Durand; *Sparking*, after Edmonds; *The New Scholar*, after Edmonds; and *Mexican News*, after Woodrich. Among his later works were a large portrait of George Washington, and two portraits of Thomas Carlyle for the Grolier Club, New York.

Jones, Patrick Henry, lawyer, born in the county of Westmeath, Ireland, Nov. 20, 1830; died in Port Richmond, N. Y., July 23, 1900. He came to the United States in 1840, and worked on his father's farm in Cattaraugus County, New York. In 1850 he became connected with a New York paper as correspondent, and later he was local editor of the *Buffalo Republic*. In 1853 he gave up journalism to study law, and in 1856 was admitted to practice at Ellicottville, N. Y. At the outbreak of the civil war he enlisted in the 37th New York Regiment as second lieutenant. He was promoted to adjutant and then to major of that regiment, and was made colonel of the 154th New York Regiment, Oct. 8, 1862. He was wounded and taken prisoner at Chancellorsville, and after his exchange, in October, 1863, served in the West and in the Atlanta campaign, and in June, 1864, was assigned to the command of a brigade. He was commissioned brigadier general of volunteers, Dec. 4, 1864. In June, 1865, he returned to his law practice. In 1865 he was elected clerk of the Court of Appeals of New York State, which office he held three years. April 1, 1869, he was appointed postmaster of New York city, and he served as such during President Grant's first term, after which he again returned to his law practice. In 1875 he was appointed register of the city and county of New York, and he held the office three years.

Judd, Albert Francis, jurist, born in Honolulu, Hawaiian Islands, Jan. 7, 1838; died there May 20, 1900. His father was Dr. Gerrit Parnele Judd, a medical missionary under the auspices of the American Board. Chief-Justice Judd was graduated at Yale University in 1862, and at Harvard Law School in 1864. He returned to Honolulu and began the practice of law. From 1868 till 1872 he served in the Hawaiian Legislature. In 1873 he was made Attorney-General by King Lunalilo. The following year he became a justice of the Supreme Court, and since 1881 had been Chief Justice. In comment upon this court, in a letter to a friend, he wrote: "I feel that no court has ever had such a diversified num-

ber and quantity of questions to decide as has fallen to the lot of the Hawaiian Supreme Court in the last quarter of a century, during the time the islands began their development and lasting till they became a part of the United States." He was also a leader in the religious and educational movements in the islands.

Keeler, James Edward, astronomer, born in Lasalle, Ill., Sept. 10, 1857; died in San Francisco, Cal., Aug. 12, 1900. In 1869 his parents removed to Mayport, Fla., where his fondness for astronomical studies was developed, and where in 1875-'77 he had charge of the Mayport Astronomical Observatory, in which were a quadrant, a two-inch telescope, a meridian circle, and a clock. At that time he constructed a meridian-circle instrument, which he subsequently described. He entered Johns Hopkins University in 1877, and was graduated there in 1881. Meanwhile, with Charles S. Hastings, he served on the United States Naval Observatory expedition under Edward S. Holden that observed the solar eclipse of July 29, 1878, from Central City, Col. Before graduation he was appointed assistant at the Allegheny Observatory, Pittsburg, Pa., under Samuel P. Langley, whom he also accompanied on his expedition to Mount Whitney, Cal., in June to September, 1881. He continued at the Allegheny Observatory two years, and then spent a year in Heidelberg and Berlin, pursuing higher scientific studies. In 1884 he returned to the Allegheny Observatory, and aided Dr. Langley in his work on lunar heat and the infra-red portion of the solar spectrum. He was appointed assistant to the Lick trustees in 1886, and proceeded to establish a time system, also aiding in the installation of the instruments on Mount Hamilton. When the observatory was completed he was appointed astronomer and placed in charge of the spectroscopic work. The large star spectroscope was constructed mainly from his designs, and the results of his observations of the atmospheres of Saturn's rays and of Uranus, and of the spectra of the nebula in Orion, did much to establish his reputation. He had charge of a successful expedition sent by Lick Observatory to Bartlett Springs, Cal., to observe the solar eclipse of Jan. 1, 1889. He resigned from Lick Observatory in 1891 to succeed Dr. Langley as director of Allegheny Observatory and as Professor of Astrophysics in the Western University of Pennsylvania. Here he remained seven years and continued his valuable spectroscopic work. His investigations included a study of the nebula in Orion and the stars immersed in it, establishing the fact that the nebula and the stars are closely related in physical condition; also observations of Saturn's rings, proving that they are a cluster of meteorites—myriads of little moons. In 1898 he returned to Mount Hamilton as director of the observatory, which place he held until his death. He devoted his observing time to the Crossley reflector, and began a study of the Pleiades and the nebula in Orion. He also began photographing all the brighter nebulae in Herschel's Catalogue, at least half of which he completed. His observations on the great nebula of Orion, published in 1899, gave "an impression of the scope of a work that was designed to distinguish a new epoch in astronomical research." The honorary degree of Sc. D. was conferred on him by the University of California in 1893. He received the Rumford medal from the American Academy of Arts and Sciences in 1898, and also received the Henry Draper medal of the National Academy of Sciences in 1899, of which academy he was elected a member in 1900.

Keeley, Leslie E., physician, born in 1842; died in Los Angeles, Cal., Feb. 21, 1900. He was graduated at Rush Medical College in 1864. He founded the Keeley Institute system for the cure of inebriety and the use of narcotic drugs, commonly known as the gold or Keeley cure, and was president of the company that bears his name.

Keep-Schley, Emma A., philanthropist, born in Watertown, N. Y., Sept. 19, 1827; died in New York city, May 10, 1900. She was a daughter of Norris M. Woodruff, and married Henry Keep, at one time president of the New York Central Railroad, in 1847. Mr. Keep died in 1869, and in 1876 Mrs. Keep married Judge Schley, of Savannah, Ga., who died in 1882. Her gifts to charitable societies and individuals were numerous and of large amount. She gave to the New York Ophthalmic Hospital \$250,000, and endowed the Keep Memorial Home for Old Ladies, in Watertown, N. Y. The rents from office buildings in Watertown are set aside for the maintenance of this institution.

Key, David McKendree, lawyer, born in Greene County, Tennessee, Jan. 27, 1824; died in Chattanooga, Tenn., Feb. 3, 1900. He spent his early years on a farm, and in 1850 he was graduated at Hiwassee College, in East Tennessee. He studied law, and began his practice at Chattanooga in 1853. During the civil war, although opposed to secession, he yielded to the authorities of his State and became lieutenant colonel of the 43d Tennessee Infantry. He served through the war, and surrendered under Gen. Joseph E. Johnston in North Carolina. In 1865 he was pardoned by President Johnson, who was his old friend, and resumed the practice of law in Chattanooga. In 1869 he was a member of the Tennessee constitutional convention. In 1870 he was elected chancellor of the Chattanooga circuit, which office he held until 1875. In 1872 he was a candidate for Congress, but was defeated. In August, 1875, he was appointed United States Senator to fill the unexpired term of Andrew Johnson, but he failed of election to succeed himself. In 1877 President Hayes selected him as Postmaster-General in his Cabinet. In 1880 he was appointed United States district judge for the Eastern District of Tennessee, and he served till 1894, when he retired, having reached the limit of age. In July, 1891, he was made dean of the law school of Grant University, at Nashville, Tenn.

King, John Alsop, born in Jamaica, Long Island, in 1817; died in New York city, Nov. 21, 1900. He was graduated at Harvard in 1835, studied law, and began to practice in New York city. In later years he abandoned the law and was engaged in the real-estate business. He was a Republican presidential elector in 1872, and in 1874-'75 he was a State Senator. He was one of the oldest and most enthusiastic members of the New York Historical Society, and was its president from 1887 till the time of his death.

Knox, Charles Eugene, clergyman, born in Knoxville, N. Y., Dec. 27, 1833; died in Point Pleasant, N. J., April 30, 1900. He was graduated at Hamilton College in 1856, and studied theology at Auburn and Union Seminaries. He was ordained to the ministry and installed as pastor of the First Presbyterian Church, in Bloomfield, N. J., June 8, 1864, and continued in charge till 1873. In that year he was chosen president of the German Theological Seminary of Newark, situated in Bloomfield. He received the degree of D. D. from Princeton College in 1874. He published *A Year with St. Paul* (New York, 1862); *The Second Year* (1864); *The Third Year* (1865); *Love to the End* (Philadelphia, 1866); *David the King* and the *Order of the Psalms in his Life* (New York, 1876).

Koehler, Sylvester Rosa, art critic, born in Leipsic, Germany, Feb. 11, 1837; died in Littleton, N. H., Sept. 15, 1900. He came to the United States in 1849. He edited the *American Art Review* during its existence, and contributed largely on art subjects to periodicals in the United States and in Europe. He was for many years curator of the print department of the Museum of Fine Arts, Boston, and he made several trips abroad in the interests of that institution. He was honorary curator of the section of graphic arts in the National Museum, Washington, and was a fellow of the American Academy of Arts and Sciences. He lectured on engraving, etching, etc. He published translations of von Betzold's *Theory of Color*, edited by Prof. Edward C. Pickering (1876), and of Lalanne's *Treatise on Etching*, with notes (1880). He was the author of *Art Education and Art Patronage in the United States* (1882); *Etching, an Outline of its Technical Processes and its History, with Some Remarks on Collections and Collecting* (1895); and of the text for *Original Etchings by American Artists* (1883); *Twenty Original American Etchings* (1884); and for *American Art* (1887). He also prepared the *Catalogue of the Engravings, Dry Points, and Etchings of Albrecht Dürer*, published by the Grolier Club, New York, and edited the *United States Art Directory and Yearbook* for 1882 and 1884. At the time of his death he was at work on a history of color printing, which remains incomplete.

Landis, Charles K., lawyer, born in Philadelphia, Pa., March 16, 1834; died in Vineland, N. J., June 12, 1900. He studied law, and in 1851 was admitted to the bar. He made considerable money in his practice, and in 1857, with the idea of retiring to the country and founding a colony, he established the village of Hammonton, N. J. In 1861 he purchased several thousand acres in Cumberland County, New Jersey, which was sold in building lots, and from this grew the village and city of Vineland. For a time he was the first man in the place, and owned the only newspaper there. Later an opposition newspaper was established, and its editor harassed Mr. Landis so much that the latter shot him. For this Landis was tried and acquitted. Sea Isle City, Landisville, New Italy, and other south Jersey towns were also founded by him.

Lane, Thomas Henry, artist, born in Philadelphia, Pa., Feb. 24, 1815; died in Elizabeth, N. J., Sept. 27, 1900. Early in life he made the acquaintance of Edgar Allan Poe, with whom he was connected as business manager in the publication of the *Broadway Journal*. Later he removed to Washington, where he studied art under Leutze. As an artist Mr. Lane was best known for his dainty and charming miniatures on ivory and porcelain; he did excellent work with his brush till three years before his death. He lived for a time in Westchester, N. Y., and in 1892 removed to Elizabeth, N. J.

Langlois, Augustus Bartholomew, clergyman, born in Chavanay, Department of the Rhône, France, April 24, 1832; died in St. Martinville, La., July 31, 1900. He came to the United States in 1855, and, finishing his studies at the College of Mount St. Mary of the West, Cincinnati, was ordained on June 11, 1855. Six months later he was stationed at Point à la Hache, Plaquemines Parish, where he labored thirty years; in 1887 he was transferred to St. Martinville, and he remained its rector till the time of his death. When very young he became interested in botany, and at the age of sixteen made an herbarium of 1,200 plants gathered in the neighborhood of Mont-

brison, France. On his appointment to Point à la Hache he renewed his studies, and he was known throughout the scientific world as a botanist of rare attainment. His studies of the flowers of Louisiana have covered that field completely. His collection of plants, the work of more than fifty years, was very large; and in addition he supplied museums with the flora of this region, and in recognition of his work several plants have been named for him. He published several volumes on the fungi of Louisiana, and his *Catalogue Provisoire des Plantes Phanérogames et Cryptogames de la Basse Louisiane* is a standard. All his literary work was written in French, and his name is better known to the scientific bodies of Europe than to those of the United States.

Lawler, Francis Xavarius, clergyman, born in County Cavan, Ireland, June 22, 1822; died in Alexandria, S. D., Sept. 10, 1900. He removed with his parents to Franklin County, New York, in 1824, studied for the priesthood, and was ordained subdeacon in 1844 and priest, Dec. 26, 1845. He was at once sent on missions. He was vice-president four years and president four years of St. Mary's College, Marion, Ky. After a short vacation he was made master of discipline at Notre Dame, Ind., where he remained two years. Later he served a year as Superior of St. Pius Seminary, in Kentucky. From 1859 till 1870 he was in charge of the church at Laporte, Ind., and from 1871 till 1878 at Logansport. He later served as priest at Lawrence and other places in Kansas, and in 1881 went to Dakota, serving as superintendent of the Yankton Indian School till December, 1884. He then removed to Alexandria, where he was priest of the Church of Our Lady of Mercy. May 20, 1896, he was appointed domestic prelate to the Pope. He was also vicar general of South Dakota, and one of the deans of the diocese.

Lawrence, Ada, actress, born in New York, July 7, 1821; died in Quincy, Ill., April 1, 1900. She was a daughter of Robert Bensell, leader of the orchestra of the Old Bowery Theater. Her first appearance was in this theater, at the age of eleven, and she played in various theaters and companies of the country until her retirement, in 1885. Of this time the greater portion was spent in Southern theaters, where before and during the war she was very popular as a leading woman under her second married name of Ada Logan. Her first husband was Samuel Browne, a comedian of ability.

Lester, John Henry, inventor, born in Montville, Conn., Sept. 27, 1815; died in Brooklyn, N. Y., Jan. 10, 1900. He invented a lock-stitch sewing machine, and was one of the pioneer sewing-machine manufacturers in the United States. He also invented a wood-planing machine and several minor mechanical appliances. In the winter of 1859-'60, with Samuel C. Robinson, he formed a stock company for making wood-planing machines in Richmond, Va. This plant was pressed into service by the Confederates, and the firm was directed to alter arms for the Southern army. Mr. Lester, being a Northerner and a loyal man, objected, and had the plant appraised. The value was fixed at \$300,000, which was paid in Confederate money. He obtained an assignment as a purchasing agent for the Confederate Government, which enabled him to get through the lines to Washington, where he surrendered his documents to Gen. Benjamin F. Butler, after an interview with President Lincoln. The Government, however, was not satisfied with his loyalty, and he was sentenced by a military commission to ten years' imprisonment. He was pardoned after serving twenty months. He subsequently

brought suit against Gen. Butler in the Supreme Court of the United States. The Government was made the defendant, and on the trial Gen. Butler appeared for the Government. After pending twenty years, the suit was dismissed on a technicality.

Lewelling, Lorenzo D., ex-Governor, born in Salem, Iowa, Dec. 21, 1846; died in Arkansas City, Kan., Sept. 3, 1900. At the age of sixteen he began work as a laborer on the Chicago, Burlington and Quincy Railroad. Later he went to St. Louis and became a driver of cattle for the quartermaster's department of the National army in Tennessee, and then one of a bridge-building corps at Chattanooga. After the war he had a varied career; he studied at Knox College, taught in a Quaker institute at Salem, edited a Republican newspaper there, and then for fifteen years had charge of the Iowa State Reform School. He represented Iowa in national conferences of charities, and was a member and for a time president of the Iowa State Normal School Board. In 1880 he established at Des Moines an anti-ring Republican newspaper. In 1887 he removed to Wichita, Kan., and engaged in the commission business. In 1888 he was defeated as the Liberal candidate for Secretary of State. In 1892 he was nominated by the Democratic and Populist parties as the fusion candidate for Governor and was elected. In 1894 he was renominated, but was defeated. After the expiration of his term as Governor he engaged in real-estate and dairy business.

Lewis, John Randolph, soldier, born in Edinburg, Pa., in 1835; died in Chicago, Ill., Feb. 8, 1900. At the outbreak of the civil war he enlisted, May 2, 1861, as sergeant in the 1st Vermont Infantry; later he mustered a company, and, Sept. 16, 1861, was commissioned captain. He was advanced to major, July 16, 1862; lieutenant colonel, Oct. 6, 1862; colonel, June 5, 1864; and mustered out of the service, Sept. 11, 1864. He was made colonel in the Veteran Reserve Corps, Sept. 12, 1864, and brigadier general by brevet, March 13, 1865. In the regular army he was commissioned major of the 44th Infantry, Jan. 22, 1867, and retired with the rank of colonel, April 28, 1870. He participated with the Army of the Potomac in 12 battles, and lost his left arm in the last. In 1872 he settled in Atlanta; he soon became identified with the public life of that city and was appointed postmaster, and served as secretary of the Atlanta Exposition. Later he settled in Chicago.

Lippincott, Job Hilliard, lawyer, born near Mount Holly, N. J., Nov. 12, 1842; died in Jersey City, N. J., July 5, 1900. He was graduated at Harvard Law School, was admitted to the bar in 1867, and began practice in Hudson City, N. J. He was elected as a Democrat to the Board of Education in 1868, and served as its president till 1871, when Hudson City became a part of Jersey City. In 1874 he was elected counsel of the Hudson County Board of Freeholders, and he was annually re-elected for thirteen years. In 1886 he was appointed United States district attorney for New Jersey. He resigned in 1887 to become law judge of Hudson County for an unexpired term, and in 1888 was reappointed for a full term of five years. During this term as judge he became prominent on account of his imprisonment of ballot-box stuffers in 1892. After the election for Governor in 1889 an investigation showed that about 5,000 fraudulent ballots were cast, and Judge Lippincott was one of the most active in pushing the trials of the 67 election officers, who were mainly concerned in the crime. In Janu-

ary, 1893, he was appointed to the Supreme Court bench, and in 1900 was reappointed.

Liscum, Emerson H., soldier, born in Vermont, July 16, 1841; died near Tientsin, China, July 13, 1900. He enlisted May 2, 1861, as a corporal in the 1st Vermont Infantry, and served till August of the same year, when he was mustered out and immediately re-enlisted as a private in the 12th Regular Infantry. On March 22, 1863, he was commissioned second lieutenant, and two months later first lieutenant. For gallant service at the battle of Bethesda Church, and during the campaign before Richmond he was, Aug. 1, 1864, brevetted captain. He was transferred to the 30th Infantry in September, 1866. March 26, 1867, he accepted a captaincy in the 25th Infantry. His advancement in rank from that time was as follows: Captain, 19th Infantry, July, 1870; major, 22d Infantry, May 4, 1892; lieutenant colonel, 24th Infantry, May 23, 1896; colonel, 9th Infantry, April 25, 1899. He was severely wounded at the battle of Gettysburg. From 1870 till the beginning of the Spanish War he was in service in Louisiana, the Departments of the Missouri and Texas, and the Division of the Atlantic. He was known in the army as one of the best of the old Indian fighters. His regiment, the 24th, formed part of the 3d Brigade, 1st Division, 5th Army Corps before Santiago, and he was brigade commander after two commanding officers had been disabled. He was badly wounded at the battle of San Juan Hill. For this service he was made brigadier general of volunteers, July 12, 1898, and was honorably discharged from the volunteer service Dec. 31, 1898. His sick leave terminated with his appointment as colonel, April 25, 1899, of the 9th Infantry, assigned to duty in the Philippine Islands. He served more than a year there, being twice detached from his regiment to command the 1st Brigade, 2d Division, 8th Army Corps. His name was to have been presented at the next session of Congress for promotion to the rank of brigadier general. He sailed from Manila for Taku with his regiment, June 27, 1900, and fell at the head of his men, while leading an attack, in co-operation with the allied armies, on the city of Tientsin.

Little, John Zebulon, American actor and dramatist, born in Philadelphia, Pa., in 1838; died in New York city (Brooklyn), March 9, 1900. Was one of the most popular melodramatic actors of the United States, and among the first to engage in the profitable presentation of that class of drama at cheap prices by traveling from city to city with a company under his own management and playing in second-class theaters. He was a member of the company at Wood's Museum (now Daly's Theater) in New York city in 1873, and made his first success as Abbé Faria in *The Ocean of Life*. In this theater the actors played many parts during the season, and Little won a good reputation as a hard-working and careful man. In 1874 his first original play, called *Santiago Avenged*, was produced, with Mr. Little in the principal character. Another of his plays, *The Golden Gulch*, was produced by him at Tony Pastor's Theater in August, 1879. He wrote and produced in 1880 *The World*, in which he starred for years.

Locke, Elbridge W., song writer, born in Stoddard, N. H., Jan. 1, 1818; died in Chelsea, Mass., June 11, 1900. He served as blacksmith's apprentice, then as country schoolmaster, and taught his pupils music in the evening, often composing his own words and music. A few years before the civil war he was teaching his songs in the large towns of the Northern States.

In the campaign of 1860 he accompanied the orators on the stump, singing his songs. In 1862, with President Lincoln's approval, he went to the front to sing for the soldiers, and he spent three years with the different armies, East and West. Among his songs were Peter Butternut's Lament, Marching on to Richmond, We Must Not Fall Back any More, Ulysses Leads the Van, and Our Free America.

Lowrie, John Cameron, clergyman, born in Butler, Pa., Dec. 16, 1808; died in East Orange, N. J., May 31, 1900. He was graduated at Jefferson College in 1829. He attended Western Theological and Princeton Seminaries, was graduated at the latter in 1832, and was licensed to preach. He went to India as a missionary in 1833, but his health failed, and he returned to the United States in 1836. He became assistant secretary of the Presbyterian Board of Foreign Missions in 1838, and served till 1850. He was pastor of the 42d Street Presbyterian Church, New York, from 1845 till 1850. In 1850 he became secretary of the Presbyterian Board, and served till 1891, when he retired and was made secretary emeritus. He was moderator of the Presbyterian General Assembly in Pittsburg in 1865. Dr. Lowrie published *Travels in Northern India; Two Years in Upper India; Memoirs of the Hon. Walter Lowrie; Manual of Foreign Missions; Missionary Papers; Presbyterian Missions*; and many articles in periodicals.

Ludlow, George Craig, jurist, born in Milford, N. J., April 6, 1830; died in New Brunswick, N. J., Dec. 18, 1900. He was graduated at Rutgers College in 1850, and in 1853 was admitted to the bar and began practice in New Brunswick. He was counsel for that city, was a member of the Board of Freeholders of Middlesex County, and for several years was president of the New Brunswick Board of Education. In 1876 he was elected to the State Senate, and in 1878 was chosen president of that body. In 1880 he was elected Governor of New Jersey on the Democratic ticket. In 1894 he was a member of the Constitutional Commission. June 13, 1895, he was appointed justice of the Supreme Court, which office he held at the time of his death.

McCartee, Divie Bethune, missionary, born in Philadelphia, Pa., Jan. 13, 1820; died July 17, 1900. He was graduated at the University of Pennsylvania, from which institution he received the degrees of A. M. and M. D., and began the practice of medicine in Philadelphia. In June, 1843, he was requested by the Board of Foreign Missions of the Presbyterian Church to go to China as a medical missionary. In 1844 he opened a mission at Ningpo, and for nearly forty years thereafter devoted his life to work among the Chinese and Japanese. He received a gold medal from the Chinese Government in recognition of his services in connection with the suppression of the Macao coolie traffic, and later received the title of consul general for services in the Chinese legation. From the Japanese Government he received the decoration of the Fifth Order of the Rising Sun.

McClernand, John Alexander, lawyer, born in Breckenridge County, Kentucky, May 30, 1812; died in Springfield, Ill., Sept. 20, 1900. In 1832 he was admitted to the bar, and in the same year he was a volunteer in the war against the Sacs and Foxes. In 1835 he established the Shawneetown, Ill., Democrat. From 1837 till 1842 he was a member of the Illinois Legislature. In 1843 he was elected to Congress, where he served till 1851, was re-elected in 1858, and resigned at the outbreak of the civil war. He was

appointed brigadier general of volunteers, accompanied Gen. Grant to Belmont, and did good service at Fort Donelson. March 21, 1862, he was promoted major general of volunteers. He commanded a division at Shiloh, and in January, 1863, relieved Gen. Sherman in command of the expedition to Vicksburg. He afterward commanded the force that captured Arkansas Post, and was present at the battle of Champion Hills. In July, 1863, he was relieved from command of the 13th Army Corps, pending an investigation of charges made against him by Gen. Grant. These charges were not sustained, and, in January, 1864, he was restored to active command. He resigned from the army in November, 1864. In 1870 he was elected circuit judge for the Sangamon, Ill., district, and he served till 1873. In 1876 he was chairman of the Democratic convention at St. Louis, and under President Cleveland he served as a member of the Utah Commission.

McClure, Daniel, soldier, born in Indiana, in 1830; died in Louisville, Ky., Oct. 31, 1900. He was graduated at West Point in 1849, and was brevetted second lieutenant of mounted rifles. He served at the Cavalry School for Practice, Carlisle, Pa., 1849-'50, at Fort Laramie, Dak., in 1850, resigning from the service Nov. 30, 1850. He was colonel of the Indiana militia from 1854 till 1858, and was Secretary of State of Indiana from 1856 till 1858. During the civil war he was a paymaster, receiving the following appointments: Major and paymaster, Oct. 23, 1858; brevet lieutenant colonel, March 13, 1865, for faithful and meritorious conduct during the war; brevet colonel, March 13, 1865, for faithful and meritorious conduct in the pay department; colonel and assistant paymaster general, July 25, 1866. He retired from the army Dec. 30, 1888.

McClurg, Joseph W., lawyer, born in St. Louis County, Missouri, Feb. 17, 1818; died in Lebanon, Mo., Dec. 2, 1900. He studied at Oxford College, Ohio. In 1841 he went to Texas, was admitted to the bar, and became clerk of the circuit court. He returned to Missouri in 1844, and engaged in mercantile pursuits. In the civil war he was colonel of an infantry regiment in the National service. He was elected as a Republican to Congress in 1862, 1864, and 1868. In the latter year he was elected Governor of Missouri on the Republican ticket. In recent years he was extensively engaged in mining.

McCormick, Leander James, inventor, born in Walnut Grove, Va., Feb. 8, 1819; died in Chicago, Ill., Feb. 20, 1900. At an early age he became associated with his father in the reaper-manufacturing industry, and in 1846 had a third interest in the 75 reaping machines built and sold by the company. In 1847 he removed to Cincinnati, and in 1848 to Chicago, where he and his brother, Cyrus H., formed a partnership in 1849. He supervised the manufacturing department of the business till 1879, when it was incorporated as the McCormick Harvesting Machine Company. He remained actively engaged in the affairs of the corporation till 1889, when he retired. He invented many improvements in the machine that made his family celebrated. In 1871 he presented an observatory and a 24-inch refracting telescope to the University of Virginia.

McGill, Alexander Taggart, lawyer, born in Allegheny City, Pa., in 1843; died in Jersey City, N. J., April 21, 1900. He was graduated in 1864 at Princeton College, where his father was a professor, and at the Columbia Law School in 1866. He was admitted to the New Jersey bar as an attorney in 1867, and as a counselor in 1870. He removed from Trenton to Jersey City in 1868. In

1874 and 1875 he was city attorney for Bayonne, N. J. In these years he was also a member of the New Jersey Legislature. In April, 1878, he was appointed prosecutor of the pleas for Hudson County. In 1883 he became law judge of the same county. March 29, 1887, he was appointed Chancellor of New Jersey, and in 1894 was re-appointed, holding the office at the time of his death. In 1895 he was defeated as the Democratic candidate for Governor. He received the degree of LL. D. from Princeton College, and that of LL. B. from Columbia Law School.

McGlynn, Edward, clergyman, born in New York city, Sept. 27, 1837; died in Newburg, N. Y., Jan. 7, 1900. He attended the public schools and the Free Academy. At fourteen he was sent by Archbishop Hughes to the College of the Propaganda, in Rome. He received the degree of doctor



of philosophy in 1856 and of theology in 1860. He was ordained a priest in March, 1860. In October he was recalled to New York by Archbishop Hughes, and appointed assistant to the Rev. Thomas Farrell at St. Joseph's Church, on Sixth Avenue. His zeal, learning, and eloquence soon attracted general attention. For a

time he was pro-rector of St. Bridget's, in Avenue B; then assistant at St. James's, in Oliver Street; then rector of St. Ann's, in Twelfth Street; and also chaplain of the Central Park Military Hospital; and finally pastor of St. Stephen's, early in 1865. He was in requisition everywhere to speak at the laying of corner stones and dedication of churches, and for lectures for charitable purposes. He aided substantially the Rev. Dr. (now Cardinal) Vaughan in establishing in the United States Catholic missions for the colored race. His artistic taste and judgment are recorded in the enlargement and paintings of St. Stephen's, and he erected its splendid altars. Convinced that the state was wise in bringing the children of all races in the country into contact in the public schools, he maintained that the Church could do its work effectively among the children without competing with the state in their secular education; and, dreading lest the Church should ever have the appearance of being bribed into political partisanship, he favored an amendment to the Constitution providing that state money should be given only to state institutions. During the Irish land league agitation under Davitt in 1879-'80 Dr. McGlynn's sympathies were strongly enlisted. He was captivated by Henry George's Progress and Poverty, and when Davitt came to New York, in June, 1882, to enlist the people here against landlordism in Ireland, Dr. McGlynn told him that "the new gospel was not only for Ireland, England, and Scotland, but for America too." Henry George shortly afterward paid him a visit, which was the beginning of an intimate friendship. When Cardinal Simeoni, head of the Propaganda in Rome, notified Cardinal McCloskey, in the autumn of 1882, to require from Dr. McGlynn a condemnation of his teachings, the doctor published in the

New York Tablet an explanation which was a justification of them, but, by an agreement with Cardinal McCloskey, he refrained from land league meetings. In the autumn of 1886 he took an earnest interest in Henry George's candidacy for the mayoralty of New York, and he was announced to speak at the opening meeting of the campaign, in Chickering Hall, on Sept. 30. Archbishop Corrigan sent him a private prohibition from attending this meeting, but he excused himself because of his public engagement to speak. The archbishop thereupon suspended him for two weeks. To a summons from Cardinal Simeoni to go to Rome, he replied that his poor health prevented this, but he reiterated the strongest expression of his teaching of the land theory. Archbishop Corrigan renewed the suspension, and in January, 1887, summarily removed him from St. Stephen's. Later, in March, 1887, being assured by Cardinal Gibbons, then in Rome, that neither the Pope nor Cardinal Simeoni had passed judgment on him, but invited him to go to Rome, he agreed to go if reinstated. By a misunderstanding, this message was not properly delivered, and the Pope, persuaded that he absolutely refused, ordered Dr. McGlynn's excommunication to take effect if within forty days he did not go to Rome. The time elapsed on July 2, 1887. This excommunication for his supposed contumacy lasted till Dec. 23, 1892, when the Pope's delegate, Mgr. Satolli, released him from it, after Dr. McGlynn had submitted to him the exposition of his economical teaching, which was declared to contain nothing contrary to Catholic faith. Dr. McGlynn, on March 29, 1887, had made an address on The Cross of the New Crusade, which led to the formation of the Anti-Poverty Society for the spreading of his theories of political economy. This society held meetings in the Academy of Music and Cooper Institute on Sunday evenings till the end of January, 1893, at which Dr. McGlynn gave a series of eloquent explanations of the theory, mainly in its relations to the brotherhood of men as founded on the fatherhood of God. By his own wish, Dr. McGlynn was not attached for some time to any parish, that he might be free to lecture, but in the beginning of 1895 he was assigned by Archbishop Corrigan to the rectorship of St. Mary's parish, in Newburg, where he zealously exercised the duties of the sacred ministry till his death. Dr. McGlynn gave proofs of his great knowledge and wonderful command of language in his sermons, addresses, and lectures, none of which were written. His charity was unbounded; his sympathy with distress made him give his all for its relief.

McNair, Frederick Vallette, naval officer, born in Jenkintown, Pa., Jan. 13, 1839; died in Washington, D. C., Nov. 28, 1900. He was graduated at the United States Naval Academy in 1857; made passed midshipman, June 25, 1860; promoted master, Oct. 24, 1860; lieutenant, April 18, 1861; lieutenant commander, April 20, 1864; commander, Jan. 29, 1872; captain, Oct. 30, 1883; commodore, May 10, 1895; and rear-admiral, July 3, 1898. His first service was on the frigate Minnesota; later he served in China and in the East India service. In 1859 he was attached to the coast survey steamer Varuna. In 1861 he was transferred to the Iroquois, of the Western Gulf squadron, and participated in the bombardment of Forts Jackson and St. Philip, the capture of New Orleans, passage both ways of the Vicksburg batteries, and the destruction of the Confederate ram Arkansas. From October, 1862, till February, 1863, he was executive officer of the Juniata, and from February till August, 1863, he

fought on the Seminole. He was again on the Juniata during May and June, 1864, and took part in the attacks on Fort Fisher. After the civil war he was assigned to duty in the Brazil squadron in 1865-'66; from June, 1866, till September, 1867, he was executive officer of the flagship Brooklyn, of the South Atlantic station. From September, 1867, till November, 1868, he was an instructor at the Naval Academy. From 1868 till 1895 he served for various periods as executive officer of the Macedonian and of the Franklin, equipment officer at Philadelphia, head of the department of seamanship at the Naval Academy, commander of the Yantic, of the Kearsarge, of the Portsmouth, and of the Constitution, member of the court of inquiry on the loss of the Jeannette, commander of the Omaha, superintendent of the Naval Observatory, and member of the Naval Officers' Retirement Board. Dec. 21, 1895, he was placed in command of the Asiatic squadron, serving till Jan. 4, 1898, when he was appointed member of the Government Lighthouse Board. In July, 1898, he was made superintendent of the Naval Academy, and served till February, 1900, when he was given sick leave.

McNulta, John, lawyer, born in New York city, Nov. 9, 1837; died in Washington, D. C., Feb. 22, 1900. In 1852 he settled in Attica, Ind., and in 1858 was made a partner in the firm of Dick & Co., wholesale tobacco dealers. In March, 1859, he removed to Bloomington, Ill. May 3, 1861, he was commissioned captain in the 1st Illinois Cavalry. Aug. 20, 1862, he was made lieutenant colonel of the 94th Illinois Infantry; he served with this regiment to the close of the war, was promoted colonel, and was brevetted brigadier general. He returned to Bloomington, and in 1866 was admitted to the bar. In 1868 he was elected to the State Senate. In 1873 he was elected to Congress. In June, 1885, he was made receiver of what is now the Toledo, St. Louis and Kansas City Railway; in April, 1887, he was appointed to the same office for the Wabash Railway; in February, 1895, for the Whisky Trust; Jan. 3, 1898, for the Calumet Electric Street Railway Company; and Jan. 4, 1898, for the National Bank of Illinois. Because of the success he attained in managing the affairs of these organizations, he became known as the "Great American Receiver."

Marble, Edward Stevenson, actor and dramatist, born in Louisville, Ky., in 1848; died in Brooklyn, N. Y., Aug. 3, 1900. He was a son of Danford Marble, one of the first comedians of Yankee dialect. His mother was Anna Warren Marble, a sister of William Warren, the actor. As with children of all theatrical families, his first appearance on the stage was made as a child. His first speaking part was that of Count Wintertsen's son in Kotzebue's *Stranger*, at Rice's Theater, Chicago, in 1860. He passed to McVicker's Theater in 1862, from which after a season he was engaged by Mrs. John Drew for the Arch Street Theater, Philadelphia. He went in the following season to the Walnut Street Theater, in the same city, then under the management of Edwin Booth and John S. Clark. While playing important parts in that company he was engaged for the first company of the California Theater, San Francisco, under the management of John McCullough and Lawrence Barrett. He played Dolly Spanker in *London Assurance* at the opening of that theater, and remained a popular member of the company for four years of almost continuous work. During the summer of 1874 Marble played with Joseph Proctor on a tour through the Pacific States.

Returning to the East, he became in 1875 the comedian of the Macauley Theater, Louisville, Ky., where he was in the first support of Mary Anderson as Peter in *Romeo and Juliet*. In 1877 he joined Lotta, and played for several seasons the parts opposite her in her plays. He was then three years the principal comedian in Mr. E. H. Sothorn's support, when he became comedian of the Madison Square Theater, New York, in which his first part was Buckstone Scott in *Young Mrs. Winthrop*. He wrote a burlesque called *Patchwork for The Saulsbury Troubadours*, *Tuxedo for Thatcher's Minstrels*, *Spot Cash for M. B. Curtis*, and *The New Olympus and The Modern Rip Van Winkle* for the students of Lafayette College, all of which were played successfully. In addition he wrote many ballads that have had temporary popularity. Since 1889 he had conducted a dramatic school in Baltimore.

Mather, Fred, fish culturist, born in Greenbush, N. Y., Aug. 2, 1833; died at Lake Nebagomay, Wisconsin, Feb. 14, 1900. He was educated at an academy in Albany, N. Y. Later he spent several years hunting and fishing in the West. In 1862 he enlisted as a private in the 113th Regiment, New York Volunteers, and later became a sergeant in the 7th New York Artillery. In 1868 he became a fish culturist and settled in Honeoye Falls, N. Y., where he began to hatch fish. In 1872 he became an assistant to the United States Fish Commission. In 1875 he succeeded in transporting salmon eggs to Germany in a refrigerator box, and about the same time he invented an apparatus by means of which shad eggs were hatched in bulk. In 1884 he succeeded in hatching the adhesive eggs of the smelt. In 1880 he had charge of the American exhibit at the Fisheries Exhibition in Berlin. In 1893 he was appointed superintendent of the New York Fish Commission station at Cold Spring Harbor, where he began the hatching of lobsters and codfish. In 1877 he became fish editor of the *Field*, Chicago, and afterward he held a similar place on the staff of *Forest and Stream*, New York. He was the author of *Fish Culture*; *Ichthyology of the Adirondacks* (1885); and *Men I Have Fished With* (1897).

Maury, Dabney Herndon, soldier, born in Fredericksburg, Va., May 21, 1822; died in Peoria, Ill., Jan. 11, 1900. He was graduated at West Point in 1846. He served in the Mexican War, and was brevetted first lieutenant for bravery at the battle of Cerro Gordo, where he was severely wounded. In 1847 he was appointed Assistant Professor of Geography, History, and Ethics at West Point, and in 1850 became assistant instructor in infantry tactics. In 1852 he was assigned to frontier duty in Texas; from 1856 till 1859 he was cavalry instructor at Carlisle barracks; and in 1860 he became adjutant general of the Department of New Mexico. At the outbreak of the civil war he resigned his commission and became a colonel in the Confederate army. For bravery in the Elk Horn campaign he was brevetted brigadier general, and for gallant conduct at Corinth and Hatchie he was made major general. He participated in the defense of Mobile and in the operations about Vicksburg. At the close of the war he was in command of the Department of the Gulf. He returned to Virginia, where in 1868 he organized the Southern Historical Society. In 1885 he was appointed minister to the United States of Colombia, serving till 1889. He was the author of many contributions to periodical literature, and published *History of Virginia*; *System of Tactics in Single Rank* (1859); *Skirmish Drill for Mounted Troops*

(1859); and *Recollections of a Virginian in the Mexican, Indian, and Civil Wars* (1894).

Mayo, Edwin Frank, actor, born in San Francisco, Cal., March 18, 1864; died in Quebec, Canada, Feb. 18, 1900. He was the only son of the late Frank Mayo, who was famous for his impersonations of Davy Crockett. The family name, abandoned by the father for the stage name "Mayo," was Maguire. Edwin made his first appearance at his father's theater, Rochester, N. Y., in 1868, as the boy in Davy Crockett. For eleven years he played as a member of his father's company, assuming from time to time different rôles in Davy Crockett and *The Streets of New York*, which constituted the elder Mayo's very limited but greatly popular repertory. During the season of 1881-'82 he was a member of his father's company in a traveling season of Shakespearean and standard plays, in which he played minor characters. For four years thereafter he was his father's principal support in the latter's play *Nordick*, first produced at the Union Square Theater, New York, May 20, 1885. On June 13, 1887, he began a series of engagements as a star in his father's play *Davy Crockett* at the Grand Opera House, New York. He traveled over the country, filling engagements for a season, and in January, 1889, produced *The Silver Age* at the Thalia Theater, New York. He rejoined his father's company in May, 1890, and remained with him for a season. Dec. 20, 1892, he began an engagement in a production of *After Twenty Years*, at Niblo's Garden, in the dual rôle of Aaron Abraham and Major Douglas. After the death of the elder Mayo, in 1896, his son succeeded him as the representative of Pudd'nhead Wilson, which character he played with much success during the regular seasons up to the day of his death. His last appearance was in this character at Montreal, Feb. 17, 1900.

Mayo, William Kennon, naval officer, born in Drummondtown, Va., May 29, 1829; died in Washington, D. C., April 10, 1900. He was appointed midshipman, Oct. 18, 1841; promoted passed midshipman, Aug. 10, 1847; master, Sept. 14, 1855; lieutenant, Sept. 15, 1855; lieutenant commander, July 16, 1862; commander, July 25, 1866; captain, Dec. 12, 1873; commodore, July 2, 1882; and retired, May 18, 1886. He took part in the blockade of Tampico and Vera Cruz. He was detailed for special service in connection with scientific observations in the North Atlantic, in surveying a route over the Isthmus of Panama, and in the work of the coast survey. He also served for a time as instructor at the Naval Academy, and wrote the *System of Naval Tactics and Fleet Sailing*, used there as a text-book. He was in command of the corvette *Housatonic* in the blockade of Charleston in January, 1862. In November of that year he was placed in command of the *Kanawha*, in the Western Gulf squadron. In February, 1864, he was stationed in Washington on special duty, but in July he took command of the *Nahant*, and made the blockade of Charleston more effective; he ran ashore nine steamers in seven months, for which he received the commendation of the Secretary of the Navy. After the fall of Charleston he became ordnance officer of the South Atlantic blockading fleet. After the war he spent three years on navigation duty at Boston, and later commanded several vessels in station service. He was commandant of the Norfolk Navy Yard from 1882 till 1885. He was retired upon his own application.

Mestayer, Charles Henry, actor, born in New York city in 1846; died in Ottawa, Canada, Jan. 22, 1900. He was a son of Henry Mestayer and

brother of the late William Mestayer, all of a family long connected with the American stage. Charles made his first appearance as an infant in the arms of his mother, who was a popular singer at Niblo's Garden, New York. He was taken to California in 1853, and continued to appear as a mute actor of children until old enough to go to school. He was educated at St. Ignatius College, in San Francisco, and in 1869 became a member of the stock company at the California Theater. He was afterward a member of various traveling companies, supporting Edwin Booth, Thomas Keene, the Lingards, and others, and for two years before his death had been playing the part of Gen. Fitzhugh Lee in the drama entitled *Remember the Maine*. His last appearance was in that rôle, Jan. 20, 1900, at Cornwall, Ontario.

Mitchell, Edward Cushing, educator, born in East Bridgewater, Me., Sept. 20, 1829; died in New Orleans, La., March 2, 1900. He was graduated at Waterville (now Colby) College, and continued his studies at Newton Theological Seminary. He was pastor in Calais, Me., for a year, and then removed to Rockford, Ill. Later he was Professor of Theology in the college at Alton, Ill. In 1872 the theological department was transferred to Chicago University, and he went there as Professor of Hebrew. In 1876 he went to London as professor in Regent's Park College, serving two years. In 1878 he established a Baptist theological school in Paris; he remained there four years, and graduated one class. In 1883-'84 he reorganized the colored schools of the South under the American Home Missionary Society. In 1887 he was appointed president of Leland University, New Orleans, which place he filled at his death. He published *Principles of Hebrew Grammar* (Andover, 1880); *Critical Handbook of the Greek New Testament* (1880); *Les Sources du Nouveau Testament* (Paris, 1882); and *Hebrew Introduction* (Andover, 1884).

Mitchell, William, jurist, born in Welland County, Ontario, Nov. 19, 1832; died in Alexandria, Minn., Aug. 21, 1900. He was graduated at Jefferson College, Pennsylvania, in 1853, and was admitted to the bar in Virginia in 1857. In the same year he removed to Winona, Minn., where he practiced from 1857 till 1873. He was appointed judge of the Third Judicial District of Minnesota, and served from January, 1874, till March, 1881, when he became a justice of the Supreme Court of that State.

Moore, Marcus Marcellus, clergyman, born near Quincy, Fla., March 15, 1856; died in Jacksonville, Fla., Nov. 23, 1900. He was the son of a slave. He entered the first private school established in Florida for negroes, and later studied at Howard University and Cookman Institute, Jacksonville. He was appointed sheriff of Bradford County in 1875, but was too young to qualify. He was licensed to preach in 1876, became presiding elder, and in 1896 was made general financial secretary of the African Methodist Episcopal Church. In May, 1900, he was elected bishop of the diocese including the State of Louisiana and Liberia and Sierra Leone, Africa. He was also president of the American Preachers' Aid Society.

Morgan, William James, editor, born in Peterborough, Canada, Oct. 16, 1840; died in Albany, N. Y., Sept. 5, 1900. He was educated in the public schools of Buffalo, N. Y. He enlisted as a private in the 116th Regiment, New York Volunteers. He participated in all the battles in which his regiment was engaged, and was severely wounded at Port Hudson, and he was brevetted lieutenant colonel. Returning in 1864, he joined the editorial staff of the *Buffalo Commercial*, and

remained with that paper twenty years. During the administration of Gov. Cornell he was made a canal appraiser, and served as chairman of the board. Later he was appointed collector of the port of Buffalo by President Harrison, and served four years. In 1894 he was selected by Comptroller Roberts as deputy comptroller. In 1898 he was nominated by the Republican party to succeed Mr. Roberts, and was elected. His death occurred on the day after his reappointment for the office, at a convention where he had been in attendance.

Morrill, Mary S., missionary of the American Board, born in Deering, Me., March 24, 1864; killed in Paoting-Fu, Chi-Li province, China, July 1, 1900. She studied at Farmington Normal School, embarked for China, March 20, 1889, and was stationed in Paoting-Fu.

Morris, William Hopkins, soldier, born in New York city, April 22, 1827; died in North Long Branch, N. J., Aug. 26, 1900. He was graduated at West Point in 1851, and entered the army as brevet second lieutenant, 2d Infantry; promoted second lieutenant, Dec. 3, 1851; and resigned on account of ill health, Feb. 28, 1854. He was appointed assistant adjutant general with the rank of captain, Aug. 20, 1861; he was assigned as chief of staff to Gen. Peck, and served during the Peninsula campaign. Sept. 2, 1862, he was made colonel of the 135th Regiment, New York Volunteers, which later became the 6th New York Artillery. He was in command of the garrison at Fort McHenry, and was ordered to Harper's Ferry, where he was made brigadier general. When Harper's Ferry was abandoned he was ordered to join the 3d Corps, Army of the Potomac; he was in reserve at the battle of Gettysburg, and participated in the action of Wapping Heights and in the Rapidan campaign. He was transferred to the 6th Corps, and took part in the Richmond campaign, being engaged in the battles of the Wilderness and Spottsylvania, where he was severely wounded. He was mustered out of the service, Aug. 24, 1864, and was made brevet major general, March 13, 1865, for services in the battle of the Wilderness.

Morrow, George Espy, educator, born in Cincinnati, Ohio, in 1840; died in Paxton, Ill., March 27, 1900. He served in the civil war as a member of the 2d Regiment, Ohio Volunteers. He was graduated at the law department of the University of Minnesota in 1866, and then became editor of an agricultural journal, serving till 1875. In 1876 he was elected president of Iowa Agricultural College. In 1877 he became dean of the College of Agriculture of the University of Illinois, and he remained there till the close of 1896, when he accepted the presidency of the Agricultural College of Oklahoma, where he served till 1899.

Mullen, Tobias, clergyman, born in Clundy, Ireland, March 4, 1818; died in Erie, Pa., April 22, 1900. He was educated at Maynooth College, came to the United States in 1843, and was ordained a priest, Sept. 1, 1844. Aug. 2, 1868, he was consecrated Bishop of Erie, and he served till Aug. 10, 1899, when he was appointed to the titular see of Germanicopolis.

Newell, Charles M., physician, born in Concord, N. H., Nov. 21, 1823; died in Watertown, Mass., May 24, 1900. At the age of fourteen he ran away to sea as a cabin boy. He became captain of the *Copia*, and spent nineteen years on the Pacific Ocean. He then began the study of medicine in Lowell, Mass., and for thirty-five years practiced the vacuum cure there and in Boston. He was at one time a correspondent of the *Boston Transcript*, signing his articles Captain Barnacle. His published works are *Leaves from an Old Log* (Boston, 1877); *Kalaui of Oahu* (1881);

Kamehameha, the Conquering King (New York, 1885); *The Voyage of the Fleetwing* (Boston, 1887); *The Isle of Palms* (1888); and *Wreck of the Greyhound* (1889).

Northrup, George Washington, educator, born in Antwerp, N. Y., Oct. 15, 1826; died in Chicago, Ill., Dec. 30, 1900. He was graduated at Williams College in 1854, and at Rochester Theological Seminary in 1857, where he remained for a time as Professor of Church History. He was ordained a Baptist minister at Rochester in 1857. From 1867 till 1892 he was president of the Baptist Union Theological Seminary, at Morgan Park, Ill., acting also as Professor of Systematic Theology. When the seminary became the divinity school of the University of Chicago, in 1892, he was placed at the head of the department of theology. He received the degree of D. D. from Rochester University in 1864, and that of LL. D. from Kalamazoo College in 1879.

Oliver, Marshall, educator, born in Massachusetts, April 29, 1843; died in Annapolis, Md., Nov. 25, 1900. In 1869 he was appointed assistant professor in the department of drawing in the United States Naval Academy, and later he became the head of the department of drawing. May 20, 1881, he was appointed Professor of Mathematics in the United States navy, serving also as instructor in drawing and librarian of the Naval Academy. At the time of his death he was instructor in the department of marine engineering and naval construction. He held the relative rank of captain in the United States navy.

Olsson, Olaf, educator, born in the province of Vermland, Sweden, March 31, 1841; died in Rock Island, Ill., May 12, 1900. He was educated at Fjellsted College, Upsala, and entered the ministry of the Lutheran Church in 1863. For six years he served as assistant pastor in the parish of Karstad, but in 1869, with a large number of his parishioners, settled in Smoky Hill valley, McPherson County, Kansas. He helped to organize the colony, and served the people in secular and spiritual matters. He was a member of the Kansas Legislature in 1871-'72. In 1877 he was called to Augustana College, Rock Island, as Professor of Theology, where he remained until 1888, when failing health compelled him to resign. The following year he traveled in Europe, but he was recalled from his travels to take charge of a Swedish congregation at Woodhull, Ill. He served this congregation until 1891, when he was called to the presidency of Augustana College and Seminary, which office he held until his death. He received the degree of D. D. in 1892, and in the following year the University of Upsala conferred on him the degree of Ph. D. He published *Det Christna Hoppet* (The Christian Hope) in 1888; *Till Rom och Hem igen* (To Rome and Home Again) in 1891; *At the Cross* (reprinted in Sweden); *Greetings from Abroad: being Recollections of Travel in England and Germany* (also translated into Norwegian). All these are published by the Augustana Book Concern, Rock Island, Ill. He was also the author of numerous articles in the Swedish periodicals of his synod.

Ottis, Fessenden Nott, physician, born in Ballston, N. Y., in 1834; died in New Orleans, La., May 24, 1900. He was graduated at the New York Medical College in 1852. From 1853 till 1861 he served as surgeon on the steamers of the United States Mail and Pacific Mail companies. In 1862 he became a police surgeon in New York city, and he was president of the medical board of the Police Department from 1870 till 1872. He served for a time as clinical lecturer, and afterward as clinical professor, at the College of Physicians and Sur-

geons. He was president of the medical board of the Strangers' Hospital from 1871 till 1873, and consulting surgeon to several other hospitals. In 1872 he was president of the American Dermatological Society. He published *Lessons in Drawing* (1849-'50); *Tropical Journeys* (1856); *History of the Panama Railroad* and of the Pacific Mail Steamship Company (New York, 1862); *Stricture of the Male Urethra* (1878); *Clinical Lectures on the Physiology and Pathology and Treatment of Syphilis* (1881); *Practical Clinical Lectures on Syphilis and the Genito-urinary Diseases* (1883); and *Diseases of the Male Urethra* (Detroit, 1887).

Ott, Joseph, actor, born in Chelsea, Mass., in 1862; died in New York city, Nov. 19, 1900. He made his first appearance in a company managed by William Mestayer, playing a version of *Le Voyage en Suisse* in the autumn of 1882. His first prominent engagement was with Kate Castleton in *The Dazzler*. He succeeded so well in eccentric comedy that in this play he subsequently starred equally with Miss Castleton. In the season of 1893-'94 he was a star in a play of his own called *The Star Gazer*. For the season of 1894-'95 he was engaged for the leading part in Rice's *Excelsior*, Jr. In 1898 he became a member of the company at the New York (formerly Olympia), New York city, and played the principal male rôles in *From Broadway to Tokio* and in *A Million Dollars*. His last appearance was in the character of King Charles II in the burlesque of *Nell Gwyn*, at the New York, Nov. 3, 1900.

Ottendorfer, Oswald, journalist, born in Zwittau, Moravia, Feb. 28, 1826; died in New York city, Dec. 16, 1900. He spent his youth at Brünn, and at the age of twenty entered the University of Vienna. It was intended that he should enter the public service, and he was matriculated in the faculty of jurisprudence. One year later he was transferred to the University of Prague, that he might learn the Czech language. In 1848 he returned to Vienna, and took an active part in the movement to overthrow the Metternich Government. He joined a volunteer corps, which in the first Schleswig-Holstein war participated in several engagements with the Danish forces. During the uprising in Vienna he was a lieutenant in the battalion commanded by Robert Blum, and with him was sentenced to death. Blum was executed, but Ottendorfer escaped, and the sentence remained on the books twenty years, when it was removed by a general pardon. He subsequently joined in the popular revolution in Saxony and Baden, after the failure of which he fled to Switzerland in 1849, and to the United States in 1850. He was employed in the countingroom of the New York Staats-Zeitung, and after the death of Jacob Uhl, its proprietor, in 1852, the management of the paper devolved upon the widow, and the services of Mr. Ottendorfer became gradually more important. He became editor in chief in 1858, and from that time directed the policy of the paper. He married Mrs. Uhl in 1859. In politics he was a reform Democrat, and was active in all the anti-Tammany movements. He was an alderman from 1872 till 1874, and in the latter year was a candidate for mayor. His more important gifts were \$300,000 to build and endow an educational institution in his native town; the Ottendorfer Free Library in Second Avenue, New York; the Isabella Home for old men and chronic invalids; and the woman's pavilion of the German Hospital.

Palmer, John McAuley, lawyer, born on Eagle creek, Scott County, Kentucky, Sept. 13, 1817; died in Springfield, Ill., Sept. 25, 1900. His early

education was gained in the common schools. In 1831 he removed with his father to Madison County, Illinois. In the spring of 1834 he entered Alton College, but lack of money compelled him to leave in the autumn of 1835. He worked for a time in a cooper's shop, then became a clock peddler, and finally, in the autumn of 1838, became teacher of a school near Canton. While teaching he studied law, and in December, 1839, was admitted to practice. In 1840 he entered politics, supporting Martin Van Buren for the presidency. In 1843 he was elected probate judge of Macoupin County. In 1847 he was elected to the Illinois State constitutional convention. In 1849 he was elected county judge, which office he held till 1851, when he was elected to the State Senate for four years. In 1854 he opposed the Nebraska bill, and, differing from his party, he resigned, went before the people on the new issue, and was again returned to the Senate in 1855. In 1856 he was president of the first Illinois Republican State convention. In 1859 he was defeated as a candidate for Congress, and in 1860 was elector at large on the Republican ticket. He was a delegate to the Peace Congress at Washington, in 1861, and favored the compromise measures adopted by the convention. When the second call for troops was made, he was elected colonel of the 14th Regiment, Illinois Volunteers. Dec. 21, 1861, he was commissioned brigadier general. Early in 1862 he took part in the operations at New Madrid and Island No. 10. He was also present at Corinth, and took part in the operations against Gen. Bragg in the retreat from Nashville. He commanded a division in the battle of Chickamauga, and was promoted to the command of the 14th Army Corps in October, 1863. He was engaged in the operations about Chattanooga, taking part in the battles of Lookout Mountain and Missionary Ridge. For gallantry at the battle of Stone River he was made major general of volunteers. Aug. 4, 1864, he was relieved of active field command at his own request. From February, 1865, till May, 1866, he was in command of the military department of Kentucky. He then settled in Springfield, Ill., and in 1868 was elected Governor of the State, serving four years. In 1872 he left the Republican party, and in 1877 was the Democratic candidate for United States Senator; he was defeated, as he was also twice thereafter; again nominated in 1890, he was successful, and served till March 4, 1897. In 1896 he accepted the nomination for the presidency by the gold Democrats, as a protest against the surrender of the Democratic party to the free-silver element. In the campaign that began just before his death he declared in favor of the re-election of President McKinley.

Park, Edwards Amasa, theologian, born in Providence, R. I., Dec. 29, 1808; died in Andover, Mass., June 4, 1900. He was graduated at Brown University in 1826, and at Andover Theological Seminary in 1831. Dec. 31, 1831, he was ordained pastor of the Congregational Church in Braintree, Mass. In May, 1835, he was appointed Professor of Moral and Intellectual Philosophy in Amherst College, where he remained till September, 1836, when he became Professor of Sacred Rhetoric at Andover. From 1847 till 1881 he held the chair of Christian Theology at Andover, and at the time of his death was Professor Emeritus of Sacred Rhetoric. Prof. Park contributed numerous essays to theological periodicals, and in 1844 was one of the founders of the *Bibliotheca Sacra*, of which he was chief editor from 1851 till 1884. His published works include *Discourses on Some Theological Doctrines as Related to the Religious Character* (Andover, 1885). He edited *Selections from*

German Literature (Andover, 1839); The Atone-ment; and Preacher and Pastor; and arranged with Austin Phelps and Lowell Mason the New Sabbath Hymn and Tune Book.

Parke, John Grubb, soldier, born in Chester County, Pennsylvania, Sept. 22, 1827; died in Washington, D. C., Dec. 16, 1900. He was graduated at West Point, July 1, 1849, and assigned



to the topographical engineers as brevet second lieutenant; promoted second lieutenant, April 18, 1854; first lieutenant, July 1, 1856; captain, Sept. 9, 1861; transferred to the engineer corps, March 3, 1863; promoted major, June 17, 1864; lieutenant colonel, March 4, 1879; colonel, March 17, 1884; and retired at his own request, July 2, 1889. He was brevetted major general, March 13, 1866. In

the volunteer service he was commissioned brigadier general, Nov. 23, 1861; major general, July 18, 1862; and mustered out of the service, Jan. 15, 1866. As topographical engineer he was engaged in 1849-'50 in determining the starting point of the boundary line between Iowa and Minnesota, and later on the survey of Little Colorado river. From March 2, 1857, till the beginning of the civil war, he was chief astronomer and surveyor in the delimitation of the northwestern boundary between the United States and British America. Early in 1862 he accompanied Gen. Burnside's expedition to North Carolina, and was brevetted lieutenant colonel of volunteers for services at Fort Macon. He served as chief of staff of the 9th Corps during the Maryland campaign, and was engaged at South Mountain and Antietam, and in the pursuit of the enemy to Warrenton. He took part in the movement of the 9th Corps into Kentucky, and commanded it on the march to Vicksburg. He was brevetted colonel for services at Jackson, Miss. He was engaged at Blue Spring in the defense of Knoxville, Tenn., and was brevetted brigadier general. He served at the Wilderness and Spottsylvania, and from Aug. 13, 1864, commanded the 9th Corps before Petersburg. He resumed charge of the northwestern boundary survey, Sept. 28, 1866. He superintended the construction of fortifications in Maryland in 1867-'68; June 1, 1868, he was placed in charge of a department in the office of the chief of engineers in Washington, and served till June, 1887, when he was appointed superintendent of the United States Military Academy. He held this post till his retirement. He was the author of Government survey reports, and also of *Compilations of Laws Relating to Public Works for the Improvement of Rivers and Harbors* (Washington, 1877); *Laws Relating to the Construction of Bridges over Navigable Waters* (1882); and *Compilation of Opinions of Attorneys-General Relative to Acquisition of Lands, Bridges, Contracts, etc.* (1882).

Parker, Julia (Mrs. J. B. Polk), actress, born in Baltimore, Md., in 1852; died there, June 20, 1900. She was a daughter of Joseph Parker, a well-known actor. She studied for grand opera in Italy, and made her *début* at La Scala in 1875. She made her first appearance in America as Violetta in *La Traviata*, at Booth's Theater, Jan. 14, 1879, under the name of Giulia Mario. At Haverly's Theater, New York, Oct. 11, 1880, she created the part of Rosamond in William A. Croffut's comic opera *Deseret*. She was the original Bathilda in

the first production of *Olivette* in America, at the Park Theater, New York, Jan. 17, 1881. She joined her husband, who was a popular comedian, in a play called *Mixed Pickles*, in which she played Cherry Brown for the first time at the Fourteenth Street Theater, New York, Aug. 17, 1885. Mr. and Mrs. Polk traveled over the country for several successive seasons with great financial and artistic profit. Their last play was *The Silent Partner*, produced at the Fourteenth Street Theater, New York, May 19, 1890, in which Mrs. Polk played Tillie Coombs.

Partridge, Mary L., missionary of the American Board, born in Stockholm, N. Y., March 27, 1865; killed in Taku, Shensi province, China, July 31, 1900. She was educated at Mount Holyoke, Rollins, and Oberlin Colleges, and joined the Shensi mission in Taku, Oct. 19, 1893.

Patton, Frank Jarvis, inventor and soldier, born in Bath, Me., in 1852; died in New York city, Nov. 12, 1900. He was graduated at West Point in 1877, and assigned to the 21st Infantry as second lieutenant; promoted first lieutenant, Sept. 22, 1884; and resigned, Sept. 28, 1889. He served in the battles of Wounded Knee and Forlorn Hope. While in the army he experimented with electricity, and he left the service to pursue his studies. He invented the multiplex telegraph system, which was considered an improvement on the Edison quadruplex system. He also invented the gyroscope used on ocean vessels for giving their position in mid-ocean. At the time of his death he was vice-president of the Columbia Carbide Company, formed to exploit his invention for the manufacture of carbide.

Pennington, Samuel Hayes, physician, born in Newark, N. J., Oct. 16, 1806; died there, March 14, 1900. He was graduated at Princeton College in 1825, and attended lectures of the Rutgers medical faculty of Geneva College. He began the practice of medicine with his uncle, and in 1839 succeeded to the latter's practice. At various times he served as a member of the Public School Board, trustee of Princeton College, trustee of the Theological Seminary, president of the New Jersey State Medical Society, and president of the New Jersey Historical Society. He was the oldest living graduate of Princeton.

Phelps, Edward John, diplomatist, born in Middlebury, Vt., July 11, 1822; died in New Haven, Conn., March 9, 1900. He was graduated at Middlebury College in 1840. He taught school for a year in Virginia, and then studied law with his father. He was admitted to the bar in 1843, after spending a year in the Yale Law School, practiced two years in Middlebury, and then settled in Burlington, where he practiced till 1851. Sept. 30, 1851, he became second comptroller of the Treasury, and he retained that office till the close of President Fillmore's administration. He then practiced his profession several years in New York city, but in 1857 again settled in Burlington, which continued to be his home and the center of his activities for a quarter century. Without giving up his law practice, he held, from 1881 till 1885, the chair of Law in Yale Law School, and was also lecturer on constitutional law in Boston University. In 1881 he was elected president of the American Bar Association. In politics he was



an old-time Whig and a proslavery and antiwar Democrat. He was nominated for Governor of Vermont in 1880, and defeated. In 1885 he was appointed by President Cleveland minister to England, which post he held four years. In 1890 he was defeated as the candidate of the Democrats in the Vermont Legislature for the office of United States Senator. In 1893 he was appointed senior counsel for the United States Government before the court of arbitration to settle the Bering Sea controversy. On his return to this country he resumed his chair in Yale College. In 1896 he publicly opposed the candidacy of William J. Bryan. He was also a bitter opponent of the war with Spain in 1898, and after the war became a pronounced "anti-expansionist." He received the degree of LL. D. from Middlebury College in 1870, and from the University of Vermont and from Harvard University in 1887. Among his published writings are *The Life and Character of Charles Linsley*; a Memoir of the Hon. Isaac F. Redfield (in Vol. XLIX of the Vermont Law Reports); and a series of articles on *The Constitution of the United States*, contributed to the Nineteenth Century in 1888.

Phelps, James, jurist, born in Colebrook, Conn., Jan. 12, 1822; died in Essex, Conn., Jan. 15, 1900. He studied law and was admitted to the bar in 1845. He was elected to the Legislature in 1853, and re-elected in 1854 and 1856. In 1858-'59 he served in the State Senate. In 1863 he was appointed judge of the Superior Court, resigning ten years later to become justice of the Supreme Court. In 1875 he was elected to Congress, and he served continuously six years.

Phillip, John Woodward, naval officer, born in New York city, Aug. 26, 1840; died in Brooklyn, N. Y., June 30, 1900. He was appointed midshipman, Jan. 1, 1861; promoted acting master, June 1, 1861; lieutenant, July 16, 1862; lieutenant commander, July 25, 1866; commander, Dec. 18, 1874; captain, March 31, 1889; commodore, Aug. 10, 1898; and rear-admiral, March 3, 1899. His first active duty was on the frigate *Constitution* and the *Santee*. On his promotion to acting master he was attached to the sloop of war *Marion* of the Gulf blockading squadron, as executive officer; later he was assigned to the gunboat *Sonoma*, of the James river fleet. From September, 1862, till January, 1865, he served on the *Chippewa*, the *Pawnee*, and the monitor *Montauk*; he took an active part in the siege of Charleston, S. C. While on the *Pawnee* he was wounded in the leg in an engagement on Stono river. At the close of the war he was sent to the China station as executive officer of the *Wachusett*, serving from January, 1865, till September, 1867; he was transferred to the flagship *Hartford*, where he served till August, 1868. From 1869 till 1871 he served on the *Richmond*, of the European squadron. He was detached in November, 1871, returned to the *Hartford* in September, 1872, and was ordered to command the *Monocacy* in June, 1873. He left the *Monocacy* in February to take command of one of the Pacific mail steamers running between San Francisco and Hong-Kong. In July, 1876, he was ordered to the command of the *Adams*, but was again detached in April, 1877, and he received leave to command the Woodruff scientific expedition around the world. In December, 1877, he was placed in command of the *Tuscarora*, engaged in surveying the western coast of Mexico. He commanded the *Ranger* from August, 1880, till October, 1883. From April, 1884, till April, 1887, he was lighthouse inspector, and later he became commander of the receiving ship *Independence*, at Mare Island Navy Yard, serving till May, 1890.

He was a member of the Board of Inspection at San Francisco early in 1890, in May of that year was ordered to command the *Atlanta*, and in December, 1891, was detailed to superintend the construction of the *New York*; and when that vessel was finished, Aug. 1, 1893, he was placed in command. He filled that post till August, 1894, when he became captain of Boston Navy Yard. Oct. 18, 1897, he was placed in command of the battle ship *Texas*. In the Spanish-American War he made himself famous for his part in the sea fight at Santiago, July 3, 1898. It was the *Texas* that, with the help of the *Oregon*, ran ashore the *Almirante Oquendo* of the Spanish admiral's squadron; and it was on that occasion that he uttered the since historic words: "Don't cheer, boys. The poor devils are dying." After the battle was over he called all his men to the quarter-deck and gave thanks to God for the victory. Aug. 30, 1898, he was detached from the *Texas* and placed in temporary command of the second squadron of the North Atlantic fleet, with the *New York* as his flagship. Jan. 15, 1899, he was placed in charge of Brooklyn Navy Yard, where he was serving at the time of his death.

Pitkin, Horace T., missionary of the American Board, born in Philadelphia, Pa., Oct. 28, 1869; killed in Paoing-Fu, Chi-Li province, China, July 1, 1900. He was graduated at Yale University in 1892, and at Union Theological Seminary in 1896, and he embarked for China, Nov. 11, 1896. Before going abroad (1894-'95) he was traveling secretary of the Student Volunteer movement.

Platt, Franklin, geologist, born in Philadelphia, Pa., in 1844; died in Cape May, N. J., July 25, 1900. He was educated at the University of Pennsylvania. During the civil war he served in a Pennsylvania regiment. In 1864 he was appointed to the United States Coast Survey, and assigned to work with the North Atlantic squadron. Later he was appointed on the staff of Gen. Poe, chief engineer of the military division of the Mississippi. In July, 1874, he was appointed assistant geologist of Pennsylvania, which post he held till May, 1881. He then became president of the Rochester and Pittsburg Coal and Iron Company. He was the author of a text-book on mining, and of the following volumes of the geological reports of Pennsylvania: *On Clearfield and Jefferson Counties* (1875); *Coke Manufacture* (1876); *On Blair County* (1880); and *The Causes, Kinds, and Amount of Waste in Mining Anthracite* (1881).

Porter, John Addison, journalist, born in New Haven, Conn., April 17, 1856; died in Putnam, Conn., Dec. 15, 1900. He was graduated at Yale in 1878. He studied law in an office in Cleveland, Ohio, but soon abandoned that profession to engage in newspaper work. He was on the staff of the *New Haven Daily Palladium* and the *Hartford Courant*, and in 1888 purchased an interest in the *Hartford Post*. Two years later he secured a controlling interest and became its editor in chief. He represented the town of Pomfret in the Connecticut General Assembly in 1891, and was elected a delegate to the Republican National Convention in 1892. On two occasions he was a candidate for the nomination for the governorship of Connecticut, and in each instance received a large number of votes. He was an earnest advocate of the nomination of Mr. McKinley in 1896, and took an active part in the campaign of that year. Mr. Porter, without solicitation on his part, was chosen for secretary to the President in February, 1897, and assumed the office, March 4, 1897. He continued in this capacity till May 1, 1900, when ill health compelled him to resign his office. He was

the author of a monograph on *The Corporation of Yale College* (1885); *The Administration of the City of Washington* (1886); and *Sketches of Yale Life* (1886).

Porter, Sarah, educator, born in Farmington, Conn., Aug. 17, 1813; died there, Feb. 18, 1900. She was a daughter of the Rev. Dr. Noah Porter, pastor of the Congregational Church of Farmington, and sister of President Noah Porter of Yale College. She began her life work with a small day school for girls, which grew into a large seminary, and attracted students from all parts of the United States. Some years previous to her death she retired from the active direction of her school.

Price, Charles W., missionary of the American Board, born in Richland, Ind., Dec. 28, 1847; **Eva Jane (Keasey) Price**, born in Constantine, Mich., Aug. 19, 1855; one child; all killed near Wenshui, Shensi province, China, Aug. 16, 1900. Mr. Price studied at Oberlin College, and was graduated at the Theological Seminary in 1889. Mrs. Price was also a student at Oberlin. They joined the Shensi mission in 1889.

Prime, Frederick Edward, soldier, born in Florence, Italy, Sept. 24, 1829; died in Litchfield, Conn., Aug. 12, 1900. He was graduated at West Point in 1850, and was assigned to work on the fortifications about New York harbor, including the building of Fort Schuyler. At the outbreak of the civil war he was captured at Pensacola, Fla., while on his way to Fort Pickens, but was released in time for duty as assistant engineer on the construction of the defenses of Washington. He served in the Manassas campaign in 1861 as captain of engineers, and later was engaged on the defenses of Baltimore. He then became chief engineer successively of the departments of Kentucky, of the Cumberland, and of the Ohio. While in the latter he was wounded and taken prisoner, Dec. 5, 1861, near Mill Spring, Ky., but was released in the following spring. He was chief engineer in Grant's Mississippi campaign, and was promoted major of engineers, June 1, 1863. He was brevetted major for gallantry at the battle of Corinth, lieutenant colonel for gallantry at Vicksburg, and, March 13, 1865, colonel for meritorious services during the war. After the war he was a member of the special board of engineers in charge of work at Willett's Point about a year, and later he served in connection with the improvements at the mouth of the Mississippi river and at Galveston. He was retired, Sept. 5, 1871.

Pryor, Luke E., lawyer, born in Madison County, Ala., July 5, 1820; died in Athens, Ala., Aug. 5, 1900. He was admitted to the bar in 1841, and began practice in Athens. In 1879 he was appointed United States Senator to fill the unexpired term of Senator Houston; he was afterward elected to the office for the full term, but declined. In 1882 he was elected a Representative in Congress, and served one term. He also represented his county in the Alabama Legislature.

Purple, Samuel Smith, physician, born in Lebanon, N. Y., June 24, 1822; died in New York city, Sept. 30, 1900. He was graduated at the medical department of the University of New York in 1844. From 1846 till 1848 he was physician in the New York city dispensary, and in 1849 was ward physician under the Board of Health during the cholera epidemic. He was vice-president of the New York Academy of Medicine from 1870 till 1875, and its president from 1876 till 1880. He was the author of medical works, including *The Corpus Luteum*, *Menstruation*. Contributions to the Practice of Midwifery, and *Observations on Wounds of the Heart*.

Rademacher, Joseph, clergyman, born in Westphalia, Mich., Dec. 3, 1840; died in Fort Wayne, Ind., Jan. 12, 1900. He was educated at St. Vincent's College, Pennsylvania, and at St. Michael's Seminary, Pittsburg. He was ordained a priest Aug. 2, 1862, at Fort Wayne. After serving about six years at missions in Indiana, he was appointed pastor of the Church of St. Paul of the Cross, at Columbia City. In 1877 he became pastor of the Church of St. Mary, at Fort Wayne. In a short time he was made chancellor of the diocese. Later he was for a short period pastor of the Church of St. Mary, at Lafayette. June 24, 1883, he was consecrated Bishop of Nashville, Tenn., and Aug. 1, 1893, he was transferred to the bishopric of Fort Wayne, which place he held at his death.

Ramsdell, George Allen, lawyer, born in Milford, N. H., March 11, 1834; died in Nashua, N. H., Nov. 16, 1900. He studied at Amherst College, in 1857 was admitted to the bar, and practiced six years in Peterboro, N. H. In 1864 he was appointed clerk of the Supreme Court of Hillsborough, and removed to Amherst, where he resided till 1866, when the records were removed to Nashua. In 1887 he resigned the office and resumed practice. Later he became treasurer of the City Guarantee Savings Bank, and at the same time was president of the First National Bank of Nashua. From 1870 till 1872 he was a member of the Legislature, and in 1876 was a member of the constitutional convention. In 1891-'92 he was a member of the Governor's Council. He was elected Governor of the State in 1896, and served till 1898. (For portrait, see *Annual Cyclopædia* for 1897, page 550.)

Reed, George William, actor, born in Philadelphia, Pa., in 1844; died there, Aug. 11, 1900. He was an elder brother of Roland Reed, and like his father, who was known as "Pop" Reed, had been associated with the Walnut Street Theater, Philadelphia, from boyhood. His first appearance was made there when he was a baby, and for many years he played minor parts as a member of the old stock company under the management of John S. Clarke. He enlisted in the navy at the beginning of the civil war, and served through the contest and for some years thereafter. For an act of signal heroism in volunteering to go down into the magazine during a fire on board his ship, in a Chinese port, Congress voted him a medal of honor. In 1882 he returned to the stage and played in companies, supporting Frederick Warde and with other stars, but retired after a few years.

Reilly, Henry J., soldier, born in Ireland, Sept. 24, 1845; died in Pekin, China, Aug. 15, 1900. In the civil war he enlisted in the navy, joining the Mississippi squadron, and took part in the Red river expedition and in the bombardment of Vicksburg. Sept. 22, 1864, he entered the regular army as a private in the 5th Artillery. He was promoted second lieutenant, Dec. 1, 1866; first lieutenant, Sept. 18, 1868; and captain, Jan. 3, 1894. In 1876 he was graduated at the artillery school. In 1894 he was placed in command of Light Battery F, 5th Artillery, and with it was stationed at the Presidio, San Francisco, and later at Fort Riley, Kansas, and at Fort Hamilton, New York. In the Spanish-American War he commanded his battery at Santiago, and later he took part in Gen. Miles's expedition to Porto Rico. After a short stay in the United States he was sent to Manila, where he arrived April 23, 1899. He took part in nineteen engagements against the Filipinos, the most important being that at Putol Bridge. His battery was selected for service in China, and he was killed by a stray bullet two days after the fall of Pekin.

Rice, Dan (Daniel McLaren), circus clown, born in New York city in 1823; died in Long Branch, N. J., Feb. 22, 1900. He was the son of an Irishman of the same name, who nicknamed him as a child after the popular old Irish clown Dan Rice. Dan's early life was spent on a dairy farm near Freehold, N. J., under a stepfather named Monahan, from whom he ran away. After some vicissitudes in western Pennsylvania, he set up in the show business with a learned pig. In 1844 he went to New York and was engaged by John Tryon at the old Bowery Amphitheater, as a song-and-dance man. Among his comrades here were Dan Emmett and Barney Williams. His career as a circus clown began with Seth B. Howe's circus in 1845, at Welch's National Amphitheater, Philadelphia, and in a short time he became the most popular man in the city. In 1847 he went to New Orleans, where he was the principal attraction of Spaulding's Circus. While filling his engagements with Dr. Spaulding he became an enthusiastic student of Shakespeare, and his familiarity with the great poet won for him the name of the "Shakespearean clown." He became a partner with Spaulding in the circus, and the firm was very successful until 1850. He traveled over the entire country during the circus season, and made a large fortune. He was in the South during the first year of the civil war, and on his return to Philadelphia was accused of rebel sympathy. In spite of his denial his season in that city was a failure, and the result was bankruptcy. In 1864 he was engaged by Adam Forepaugh at a salary of \$35,000 a year. In 1866 he was with O'Brien's Circus at a salary of \$1,000 a week. He became careless and dissipated, and in spite of his great popularity throughout the land he gradually lost the respect of his business associates. In 1878 he made a strong effort to regain habits of sobriety, but without lasting success. He was fond of doing charity work, and gave away a great part of his money. He built a soldiers' monument in Girard, Pa., his home, at a cost of \$25,000, and he gave President Lincoln \$32,000 for the benefit of wounded soldiers and their families. He retired from active life in 1882, and occupied his later years in writing his autobiography.

Richardson, Abby Sage, author, born in Massachusetts in 1837; died in Rome, Italy, Dec. 5, 1900. She made her first appearance at the Winter Garden Theater, New York city, in the company of Edwin Booth, in 1866, as Nerissa in *The Merchant of Venice*. She had been married a few years before to Daniel MacFarland, a lawyer, from whom she was divorced in 1868. Soon after her divorce she was engaged to be married to Albert D. Richardson, formerly war correspondent of the New York Tribune and afterward on the editorial staff of that journal. On Nov. 26, 1869, MacFarland shot Richardson in the Tribune office. Before the latter's death, which followed a few days after the shooting, he and Mrs. MacFarland were married. Mrs. Richardson never appeared on the stage after this tragedy, but devoted herself to literature. Her early books were *Familiar Talks on English Literature*, *Old Love Letters*, *Stories from Old English Poetry*, and *Abélard and Héloïse*. She also edited some of Richardson's writings. When the Lyceum stock company was inaugurated by Daniel Frohman in New York city, Mrs. Richardson was engaged to prepare adaptations from the French. Her best works of this character are *Americans Abroad* and *A Woman's Silence*. In collaboration with Miss Grace Furniss she wrote *The Colonial Girl* and *The Pride of Jennico*. Her last work was a dramatization of Weyman's novel, *Sophia*.

Ridpath, John Clark, historian, born in Putnam County, Indiana, April 26, 1841; died in New York city, July 31, 1900. He was graduated at Ashbury (now De Pauw) University in 1863. During his senior year he had taught in the Thornton (Ind.) Academy, and upon his graduation he was made its principal. In 1866 he was elected Superintendent of Public Instruction for Lawrenceburg, Ind., and in 1869 he was called to the chair of English Literature in his *alma mater*. Two years later he was transferred to the chair of Belles Lettres and History, and later to the chair of History and Political Philosophy. He continued as an instructor till 1885, and was vice-president of the university from 1879. In the latter capacity he was largely instrumental in securing the De Pauw endowment. After resigning his professorship he devoted himself to literary work. He was one of the editors of the *Peoples Cyclopædia* (1881), and compiled a library of universal literature. In 1897-'98 he was editor of *The Arena*. His published works are: *An Academic History of the United States* (1875); *A Popular History of the United States* (1876); *A Grammar-school History of the United States* (1877); *An Inductive Grammar of the English Language* (1879); *A Monograph on Alexander Hamilton* (1880); *Life and Work of James A. Garfield* (1882); *Cyclopædia of Universal History* (1884); *A History of Texas* (1884); *The Life and Work of James G. Blaine* (1893); *The Great Races of Mankind* (1894); *Bishop Taylor's Story of my Life: The Life and Times of William E. Gladstone* (1898); and *An Epic of Life* (poem).

Robinson, Rowland Evans, author, born in Ferrisburg, Vt., May 14, 1833; died there, Oct. 15, 1900. He was brought up on a farm and received a common-school education. After reaching manhood he went to New York city, where he learned wood engraving. His eyesight gradually failed, and in 1893 he became blind. His published works include *Uncle Lisha's Shop* (New York, 1887); *Sam Lovell's Camps* (1889); *Vermont: A Study of Independence* (Boston, 1892); *Danvis Folks* (1894); *In New England Fields and Woods* (1896); *Uncle Lisha's Outing* (1897); *A Hero of Ticonderoga* (Burlington, 1898); and *Danvis Pioneer* (Boston, 1900).

Rogers, Fairman, civil engineer, born in Philadelphia, Pa., Nov. 15, 1833; died in Vienna, Austria, Aug. 23, 1900. He was a son of Evans Rogers, a merchant in Philadelphia and a member of the Society of Friends. He was graduated at the University of Pennsylvania in 1853. While an undergraduate he devoted his attention specially to mathematics and mechanics, and on graduating he was appointed lecturer on mechanics in Franklin Institute, which place he held until 1865. Meanwhile, in 1855, he was called to the chair of Civil Engineering in the University of Pennsylvania, which he held until 1871. On retiring from this chair he was chosen a member of the board of trustees of his *alma mater*, and he continued as such until 1886, when, owing to his continued residence abroad, he relinquished his trusteeship. In 1878 he presented to the university a large library of works on engineering. He was tendered the appointment of provost of the university in 1880, but declined it. At the beginning of the civil war he was a member of the First Troop, Philadelphia City Cavalry, with which organization he saw active service, and he was for a time its commander. Subsequently he served as a volunteer engineer officer on the staffs of Gen. John F. Reynolds and Gen. William F. Smith. Under the auspices of the United States Coast Survey in 1862, he completed the survey of the Potomac

river northward from Blakiston island. He was widely known by his active interest in outdoor sports, being one of the first to introduce polo into the United States. He was for many years a manager of the Pennsylvania Academy of Fine Arts, and he was one of a committee having charge of the erection of the exhibition building at the world's fair held in Philadelphia in 1876. Besides being a member of the American Philosophical Society and the American Society of Civil Engineers, he was one of the original members of the National Academy of Sciences. His more important scientific papers were *Combinations of Mechanism representing Mental Processes* (1874) and *Notes on Grant's Difference Engine* (1874); also he was the author of *Terrestrial Magnetism and the Magnetism of Iron Ships* (1877; rev. ed., 1883) and *Manual of Coaching* (1899).

Sargent, Hannah, Mrs. (Hannah Bailey), actress, born in Providence, R. I., in 1850; died in New York city, May 2, 1900. She made her first appearance with Edwin Booth in *Richard III*, as Edward V, in the Providence Theater, in 1865. She rose to a leading place as a stock actress in a short time, and for several seasons was very popular in the permanent companies of Cincinnati and Columbus, Ohio, and Indianapolis, Ind. In 1874 she married Harry Jones Sargent (Harry Sargent Jones), manager of the Columbus Theater. In 1876 they visited San Francisco, and while there saw the first performances of Helena Modjeska at the California Theater, and on his wife's suggestion Mr. Sargent engaged the Polish actress to play under his management. Mrs. Sargent actively assisted her husband in all his eminently successful presentations of Mme. Modjeska in the United States and England, during the continuance of which she remained off the stage; but eventual financial misfortune obliged her to resume her work. When her desire to return to the stage became known to Mme. Modjeska, that lady offered her a place in her support. For more than ten years Mrs. Sargent was a member of Modjeska's companies, and as such made her last appearance at Wilmington, Del., April 3, 1900.

Sargent, John Singer, artist, born in Florence, Italy, in 1856; died in London, England, April 13, 1900. His parents were Americans residing in Florence. He was educated partly in Italy and partly in Germany. He entered the Academy of Fine Arts, in Florence, at an early age, and spent several years in art study. At the age of eighteen he entered the studio of Carolus Duran, in Paris. In 1877 he exhibited in the Salon a portrait of his master, which excited a great deal of comment. In 1879 he received honorable mention in the Salon, and in 1881 a medal of the second class. In 1884 he removed to London, where he exhibited in the Royal Academy and the Grosvenor Gallery, and his pictures met with instant success. In 1894 he was elected an associate member of the Royal Academy, and in 1897 he was made a member. He visited the United States several times, and in 1887 he painted many portraits there. During his visit in 1889 he painted the picture of *Carmenita*, which was purchased by the French Government. He was commissioned to decorate the ends of the upper corridor of the new Boston Public Library, and chose for his theme the progress of religion. Some of his best known pictures are *A Street in Venice*; *Carnation, Lily, Rose*; *Fishing for Oysters at Cancale* (1878); *En Route pour la Pêche* (1878); *Portrait of Carolus Duran* (1879); *Neapolitan Children Bathing* (1879); *El Jaleo* (1882); *Portrait of Two Children* (1883); and many portraits. He was a member of the American National Academy of Design.

Saunders, William, horticulturist, born in St. Andrews, Scotland, in 1822; died in Washington, D. C., Sept. 11, 1900. Several of his youthful years were spent in India, where his father was a gardener. He was educated at the college of Madras and the Divinity School at St. Andrews. He studied the cultivation of plants and flowers in Kew Gardens, London. In 1845 he came to the United States, and contributed to the improvement of Fairmount and Hunting Parks, in Philadelphia, and of Clifton Park, Baltimore. In 1862, on the establishment of the United States Department of Agriculture, he was placed in charge of the division of experimental gardens and grounds, which place he held at his death. He was also president of the Park Commission of the District of Columbia, and was interested in beautifying the parks of Washington. It was through the development of his ideas and largely through his labors that the Patrons of Husbandry, known as the National Grange, was organized. Of the plants introduced by the experimental gardens under his direction, the most conspicuous is the seedless navel orange, the first trees having been secured by him in Brazil in 1870.

Sawyer, Philetus, manufacturer, born in Whiting, Vt., Sept. 22, 1816; died in Oshkosh, Wis., March 29, 1900. He removed with his parents to Crown Point, N. Y., in 1817, where he was educated in the district schools. At the age of seventeen he began working as a farm hand. In ten years he had saved \$2,000, and in 1847 he removed to Wisconsin, where he engaged in the lumber business. He was elected to the Legislature in 1857 and 1861, and in 1863 was elected mayor of Oshkosh. In 1864 he was elected to Congress, and served continuously for ten years. In 1880 and 1886 he was elected United States Senator. In the lower house he was chairman of the Committee on Pacific Railroad and a member of the Committees on Commerce, Manufactures, and Invalid Pensions.

Sayre, Lewis Albert, surgeon, born in Battle Hill (now Madison), N. J., Feb. 29, 1820; died in New York city, Sept. 21, 1900. He was graduated at Transylvania University, Lexington, Ky., in 1839, and at the College of Physicians and Surgeons, New York city, in 1842. In that year he became prospector to the Professor of Surgery in the College of Physicians and Surgeons, and he held the place till made emeritus prospector in 1852. In 1853-'73 he was surgeon to Bellevue Hospital. In 1859 he was made surgeon to the Charity Hospital on Blackwell's island. From 1873 he was consulting surgeon for both hospitals. He was one of the active founders of the Bellevue Hospital Medical College in 1861, and was made its Professor of Orthopædic Surgery; he retained this chair until the college was consolidated with New York University in 1898, when he was made emeritus professor. He was the first American to remove the head of the femur in hip-joint disease. He performed the operation in 1854, and in seven years had created by this and other original methods a practically new department in his profession, orthopædic surgery. He performed his hip-joint operation before the International Medical Congress at Philadelphia in 1876. He invented numerous instruments and appliances, and was the author of the following medical works: *On the Mechanical Treatment of Chronic Inflammation of the Joints of the Lower Extremities* (Philadelphia, 1865); *Practical Manual of the Treatment of Clubfoot* (New York, 1869); *Spinal Disease and Spinal Curvature* (Philadelphia, 1878); and *Lectures on Orthopædic Surgery and Diseases of the Joints* (New York, 1883).

Schiffelin, Samuel Bradhurst, druggist, born in New York city, Feb. 24, 1811; died there, Sept. 13, 1900. He succeeded his father, Henry Hamilton Schiffelin, as head of the wholesale drug business in 1849, and retired in 1865. He devoted much of his time to the writing of religious literature. His published works include *Message to Ruling Elders*, *Music for our Churches*, *The Church in Ephesus* and the *Presbyterian and Reformed Churches*, *The People's Hymn Book*, *Children's Bread*, *Milk for Babies*, *The Foundations of History*, and *a Word to Christian Teachers and Students for the Ministry*.

Scott, Robert Kingston, ex-Governor of South Carolina, born in Armstrong County, Pennsylvania, July 8, 1826; died in Napoleon, Ohio, Aug. 13, 1900. He studied medicine in Navarre, Ohio, and later attended lectures at Starling Medical College, Columbus. He practiced medicine in Henry County, Ohio, from 1851 till 1857, and was then engaged in mercantile business till 1861. In October, 1861, he was commissioned lieutenant colonel of the 68th Ohio Regiment, and in 1862 was promoted colonel. He served at Fort Donelson, Shiloh, and Corinth, led a brigade at Hatchie river, Tenn., and was engaged at Port Gibson, Raymond, and Champion Hills, Miss. He was commissioned brigadier general of volunteers, Jan. 12, 1865, and brevetted brigadier and major general. From 1865 till 1868 he was assistant commissioner of the Freedmen's Bureau in South Carolina. In 1868 he was elected, as a Republican, the first Governor of reconstructed South Carolina, and in 1870 was re-elected. In the autumn of 1871, with other State officers, he was charged with a fraudulent overissue of State bonds, but he justified his course, and a resolution for his impeachment was defeated. Dec. 25, 1880, he shot and killed Warren G. Drury; on trial he was acquitted, the defense being that the pistol was discharged accidentally. For several years he was engaged in the real-estate business in Columbia, S. C., and Napoleon, Ohio.

Scoville, John E., educator, born in Sandy Hill, N. Y., May 9, 1812; died in Brooklyn, N. Y., March 25, 1900. He was graduated at Yale College in 1832, and in 1833 was appointed the first president of Oberlin College. In 1849 he gave up teaching and removed to Brooklyn, where he engaged in the publishing business. He retired from active business in 1865.

Sewall, Arthur, shipbuilder, born in Bath, Me., Nov. 25, 1835; died in Small Point, Me., Sept. 5, 1900. He was educated in the public schools of his native city, and then entered his father's shipyards as an apprentice. In 1854 he formed a partnership with his brother Edward, under the name of E. & A. Sewall, taking over the business of his father's firm. In January, 1855, the two brothers launched their first ship, the *Holyhead*, and from that time till 1879 they built 46 wooden vessels. In 1879, at the death of his brother, he became the head of the business, and as such continued till his death. In 1890 he began the equipment of the firm's shipyards for the complete construction of steel sailing vessels, and in 1894 the iron ship *Dirigo*, of 3,000 tons, was launched, the first of its class ever constructed in New England. He was a member of the Bath Board of Aldermen in 1876 and 1877. In 1880 he was a delegate at large from Maine to the National Democratic Convention, and again in 1896. He was the Democratic candidate for United States Senator in 1893. He was a member of the National Democratic Committee from 1888 till 1896; in June, 1895, he declared in favor of free coinage of silver, and in consequence was not continued on the national committee by his colleagues.

At the national convention held July 11, 1896, to which he was a delegate, he was nominated as the candidate for Vice-President, with William J. Bryan as the candidate for President. He became a director of the Maine Central Railroad Company in 1875, and in 1884 its president, serving till 1893. During this time he was also president of the Portland, Mount Desert and Machias Steamboat Company, and of the Eastern Railroad, as well as a director in the Mexican Central Railway, the Boston and Maine Railroad, the New York and New England Railroad, the Portland and Rochester Railroad, and some of the lines of the Atchison, Topeka and Santa Fé system. He was president of the Bath National Bank, and until 1893 of the Poland Paper Company.

Seymour, Louis Irving, civil engineer, born in Whitney's Point, N. Y., in 1860; died near Bloemfontein, South Africa, June 14, 1900. He was reared on a farm, and studied mathematics and civil engineering at night. His first regular work was with the Lackawanna Steel and Iron Company, in Scranton, Pa., and there he continued his studies. In 1882 he was sent by the Dickson Manufacturing Company to set up machinery in a Venezuela gold mine. There he remained three years, becoming superintendent. In 1888 he went to Kimberley for the De Beers Mining Company, and later he spent three years in London as consulting engineer for the Kimberley mine owners. He then went to Johannesburg as superintendent of the Rand mines. At the outbreak of the war in the Transvaal he organized a regiment in Cape Town, and was made its major. He designed and constructed aerial bridges for Gen. Roberts and Kitchener as they advanced northward toward the Transvaal. In the battle at the Zand river, June 14, while leading a charge through an open veldt, he was mortally wounded.

Shakespeare, Edward Oram, surgeon, born in Dover, Del., May 19, 1846; died in Philadelphia, Pa., June 1, 1900. He was descended from Edmund Shakespeare, a brother of the poet. He was graduated at Dickinson College in 1867, and at the University of Pennsylvania in 1869. He began the practice of medicine in his native town, but in 1875 removed to Philadelphia, where later he was appointed lecturer on ophthalmic surgery in the University of Pennsylvania. He soon became an authority on diseases of the eye, and was elected president of the Pathological Society of Pennsylvania, and pathological and ophthalmic surgeon to the Philadelphia Hospital. In 1885 he was the representative of the United States Government to investigate the causes and conditions under which cholera thrived in Europe and India; his report was exhaustive, and was published in 1889. In the war with Spain he was appointed brigade surgeon with the rank of major of volunteers, and at the time of his death he was one of a commission attached to the office of the surgeon general at Washington to investigate the causes of typhoid fever in the army. He was a frequent contributor to medical periodicals, and with J. H. C. Simes translated *Manual of Pathological Histology* (Philadelphia, 1880).

Sharpe, George Henry, lawyer, born in Kingston, N. Y., Feb. 26, 1828; died in New York city, Jan. 13, 1900. He was graduated at Rutgers College in 1847, studied at Yale Law School, and was admitted to the bar in New York city. In 1851-'52 he was attached to the American legation in Vienna. In 1854 he returned to the United States and began practice in Kingston. At the outbreak of the civil war he entered the National army as a captain in the 20th New York Regiment; in 1862 he was promoted to the colonelcy

of the 120th New York Regiment. He took part in all the battles from Fredericksburg to Appomattox. He was brevetted brigadier general in 1864, and major general in 1865. At the close of the war he was designated by Gen. Grant to parole the Army of Northern Virginia. In 1867 he was sent abroad as a special agent for the Department of State. In 1870 he was appointed United States marshal for the southern district of New York, and against the most violent opposition he took the census that demonstrated the great election frauds of 1868 in New York city, which led to the overthrow of the Tweed ring. He was surveyor of customs at New York from 1873 till 1878. From 1879 till 1882 he was a member of the State Assembly, and in 1880 and 1881 he was the Speaker of that body during the famous deadlock over the re-election of Senators Conkling and Platt. For a short time in 1883 he was at the head of the commission to Central and South America for promoting commercial relations with the United States. In 1890 he was appointed a member of the Board of United States General Appraisers, created to exercise judicial and administrative powers on appeals in customs cases; he resigned this office March 1, 1899.

Shearman, John Adams, naval officer, born in Jamestown, N. Y., in 1854; died in Chelsea, Mass., Aug. 29, 1900. He was graduated at the United States Naval Academy, June 21, 1875; entered the service as ensign, Sept. 8, 1876; promoted master, Nov. 28, 1882; lieutenant (junior grade), March 3, 1883; lieutenant, May 4, 1889; and lieutenant commander, March 3, 1899. He served on the Hartford, of the North Atlantic station, from 1875 till 1877; on the Pasaic from 1877 till 1879. In 1880 he was transferred to the Pensacola, of the Pacific station, where he served till 1885. He was on duty at a torpedo station from 1885 till 1887, when he was placed on the Nipsic, of the Pacific station. The most notable incident in his career was his heroic conduct in the hurricane at Samoa, March 16, 1889, which resulted in the wrecking of the Trenton, the Vandalia, and the Nipsic. In 1894 he was attached to the coast survey steamer Blake. In December, 1899, he was at the treatment hospital in Yokohama.

Shearman, Thomas Gaskell, lawyer, born in Birmingham, England, Nov. 25, 1834; died in Brooklyn, N. Y., Sept. 29, 1900. When nine years old he came to New York with his parents; he attended school for a time, and then became clerk in a dry-goods store. In 1857 he removed to Brooklyn, where, after a course under private tutors, he was admitted to the bar in 1859. For six years he devoted himself almost entirely to the literature of the law, and for some time he was secretary to the Code Commission of New York. He also edited a law journal. In 1868 he entered the law firm of which David Dudley Field was the head. At its dissolution in 1873 he became the senior partner in the firm of Shearman & Sterling. In 1874 he undertook the defense of his personal friend and pastor, Henry Ward Beecher, in the celebrated case brought against the famous preacher by Theodore Tilton. The trial, with its preparation and entire proceedings, occupied two years, and although the expenses amounted to \$100,000, the firm refused to accept any pay for its services. Of late years the business of the firm drifted toward the management of large estates and the conduct of the affairs of railroad corporations. Mr. Shearman devoted a great deal of his time to public questions and social and political economy. He was a Republican from the organization of that party till 1884, when he supported

Mr. Cleveland for the presidency. In 1896 he returned to the Republican party. He was an enthusiastic supporter of free trade and single-tax theories. His writings are voluminous, and include *Taxation and Revenue* (New York, 1892); *Natural Taxation* (1895); *Taxation of Personal Property* (1895); and, with Mr. Tillinghast, *Practice, Pleadings, and Forms*, and, with A. A. Redfield, *Treatise on the Law of Negligence*.

Sheeleigh, Matthias, author, born in Montgomery County, Pennsylvania, in 1820; died in Fort Washington, Pa., July 15, 1900. His ancestors were among the Palatinate refugees who settled in Montgomery County in 1732. He received his training at Pennsylvania College and Theological Seminary, Gettysburg, Pa., and was ordained in the Lutheran Church in 1852. He was pastor of Lutheran congregations in New York, New Jersey, and Pennsylvania. He was secretary of the General Synod, for more than a quarter of a century a member of the Lutheran Board of Publication, acting as president of it a few years, and twelve years as reader and reviser of works offered for publication, and for thirty-four years a member of the Board of Directors of the Theological Seminary at Gettysburg. He was editor of the Lutheran Sunday-school Herald from the time of its establishment in 1860 until his death, and editor of the Lutheran Almanac and Yearbook from 1871. He was the author of a thousand poems, including hymns that have found their way into the hymnals. He was also an enthusiastic student of local history, and was an authority in the Montgomery County Historical Society.

Sicard, Montgomery, naval officer, born in Utica, N. Y., Sept. 30, 1836; died in Westerville, N. Y., Sept. 14, 1900. He was appointed acting midshipman, Oct. 1, 1851; promoted passed midshipman, April 15, 1858; master, Nov. 4, 1858; lieutenant, May 31, 1860; lieutenant commander, July 16, 1862; commander, March 2, 1870; captain, Aug. 7, 1881; commodore, July 10, 1894; rear admiral, April 6, 1897; and retired on reaching the age limit, Sept. 30, 1898. At the beginning of the civil war he was on duty on various vessels in the blockading squadron. As executive officer of the Oneida he was present at the bombardment of Forts Jackson and St. Philip, and took an active part in the destruction of the Confederate flotilla in April, 1862, in the passage of the Vicksburg batteries in June, and in the engagement with the ram Arkansas in July of the same year. He commanded the Seneca in both attacks on Fort Fisher, and had charge of the left wing, 2d Division, in the naval land assault on that fort, Jan. 15, 1865. After the war he spent two years at the Naval Academy, and after two years more of service on the Pensacola was assigned to the Saginaw on the Pacific coast. In 1876 he was in command of the Swatara. In 1880 he was appointed inspector of ordnance at the Boston Navy Yard. From 1882 till 1890 he served as chief of the Bureau of Ordnance. To him is given the credit for the introduction of steel high-power ordnance into the navy about this time. In January, 1894, he was placed in charge of the Portsmouth Navy Yard, and in November of that year was transferred to the Brooklyn Navy Yard as commandant. April 20, 1897, he was made commander in chief of the North Atlantic squadron, but at the outbreak of the Spanish-American War was placed on sick leave, having contracted malaria. After partial recovery he applied for active duty, and was made president of the Board of Strategy. After his retirement he continued to serve, acting as chairman of the board for rewarding officers for gallant and meritorious service.

Simcox, F. E., missionary of the Presbyterian Board, born in Bullion, Pa., April 30, 1867; **May L. (Gilson) Simcox**, born in London, Pa.; both killed in Paoting-Fu, Chi-Li province, China, June 30, 1900. Mr. Simcox was graduated at Grove City College, Pennsylvania, in 1889, and at the Western Theological Seminary in 1893.

Skene, Alexander Johnston Chalmers, physician, born in Fyvie, Scotland, June 17, 1837; died in High Mount, N. Y., July 4, 1900. He was graduated at the Long Island College Hospital in 1863, and was a surgeon in the National army in 1863 and 1864. He evolved a plan for a hospital corps which is now in use in the army and the National Guard. In 1864 he was appointed adjunct professor in the Long Island College Hospital; in 1872 he was made Professor of Gynecology, and in 1886 became dean of the faculty of that institution. He was the author of many medical works, including *Diseases of the Bladder and Urethra in Women* (New York, 1878); *Treatise on the Diseases of Women* (1888); *Education and Culture as Correlated to the Health and Diseases of Women* (Detroit, 1888); *Text-book on the Diseases of Women* (New York, 1888); and *Medical Gynecology* (1895).

Smart, James Henry, educator, born in Center Harbor, N. H., June 30, 1841; died in Lafayette, Ind., Feb. 21, 1900. He was educated chiefly at the Concord, N. H., high school. He taught in Concord and other New England schools from 1858 till 1861. From 1863 till 1865 he was principal of the intermediate school in Toledo, Ohio. From 1865 till 1875 he was superintendent of schools in Fort Wayne, Ind., and then for six years was Superintendent of Public Instruction in Indiana. In 1883 he became president of Purdue University, which office he held at his death. Dr. Smart was a member of the Indiana State Board of Education twenty-seven years; was assistant commissioner of Indiana to the Vienna exposition in 1873; United States commissioner to the Paris exposition in 1878; and commissioner from the United States Department of Agriculture to the agricultural congress at The Hague in 1891. He was president of the Indiana Teachers' Association in 1871, of the National Educational Association in 1880, and of the Association of Agricultural Colleges and Experiment Stations in 1890. He received the degree of LL. D. from Indiana University in 1883. He was the author of *An Ideal School System for a State*, *The Institute System for the United States*, *The School Laws of Indiana*, *Books and Reading for the Young*, *Indiana Schools*, and *Manual of School Gymnastics*.

Smith, James Cossalett, jurist, born in Phelps, N. Y., Aug. 14, 1817; died in Canandaigua, N. Y., Sept. 26, 1900. He was graduated at Union College, and began the practice of law soon after his graduation. He was a member of the Peace Commission that met in Washington a short time before the civil war. In 1862 he was appointed to the supreme bench of New York, and he served till 1887, when he was retired.

Smith, James G., telegraph operator, born in Durham, N. H., April 14, 1836; died in New York city, March 3, 1900. In 1850 he was a messenger in the telegraph office in Durham, where he learned to operate the instrument. In 1862 he went to New York city, and during the civil war had charge of all dispatches sent from New York to the South. In 1864 he was appointed superintendent of a division of the line between Boston and Nova Scotia. In 1869, with Stephen B. Stearns, he purchased the Franklin Telegraph Company, whose wires ran from New York to Boston. Together they invented a duplex system of telegra-

phy. In 1877 he withdrew from the Franklin Company, and for a few years engaged in the electric-light business. Later he organized the Continental Telegraph Company and established the rapid stock exchange service between New York and Philadelphia. In 1881 he organized the Builders' and Merchants' Telegraph Company as a rival to the Western Union. In 1885 his latest company failed, and from that time he devoted his attention to telephones. At the time of his death he was president of the Smith Vassar Telephone Company.

Smyth, Frederick, jurist, born in County Galway, Ireland, in 1832; died in Atlantic City, N. J., Aug. 18, 1900. He came to New York city in 1849, and began work as a lawyer's office boy. In 1855 he was admitted to the bar. In 1857 he became assistant in the office of United States District-Attorney McKeon, and upon the latter's retirement, they formed a law partnership, which was continued till 1879. From 1863 till 1865 Mr. Smyth was a commissioner of schools; he also served as a member of the Board of Education and as counsel to the Excise Board. In 1875 he was defeated as the Tammany candidate for Recorder; in December, 1879, he was appointed to fill the unexpired term of Recorder Hackett, and in 1880 was elected for the full term of fourteen years. In 1894 he was a candidate for re-election, but was defeated by John W. Goff. In 1896 he was elected a justice of the Supreme Court of New York, which office he held at his death. He was a member of Tammany Hall from the time he became a voter.

Sonntag, William Louis, artist, born near Pittsburg, Pa., March 2, 1822; died in New York city, Jan. 22, 1900. His youth was passed in Cincinnati, and there he began the study of art in 1848. In 1851 he removed to New York city. From 1853 till 1857, and in 1861, he studied abroad. He devoted himself to the painting of American landscapes, keeping as far as he could from the realistic school. Some of his works are *View on Licking River, Kentucky* (1846); four pictures entitled *The Progress of Civilization* (1848); *The Spirit of Solitude* (1851); *Evangeline* (1852); *A Dream of Italy* (1860); *A Morning in the Alleghanies* (1865); *Sunset in the Wilderness*, exhibited at the Centennial Exhibition in 1876; and *The Fog Rising off Mount Adams*. He was a member of the National Academy of Design, of the Water Color Society, and of the Artists' Fund Society.

Squibb, Edward B., chemist, born in Wilmington, Del., July 4, 1819; died in Brooklyn, N. Y., Oct. 26, 1900. He was graduated at Jefferson Medical College, Philadelphia, was appointed a surgeon in the United States navy, and later was placed in charge of the medical station of the Brooklyn Navy Yard. During the civil war his skill was utilized by the Government in the preparation of pharmaceutical supplies. About this time he prepared a cholera remedy, which has been a standard ever since. Later he resigned from the navy and established a private laboratory in Brooklyn. In 1885 he retired.

Stallo, John Bernhard, lawyer, born in Sierhausen, Oldenburg, March 16, 1823; died in Rome, Italy, Jan. 6, 1900. He came to the United States in 1839. He taught in a private school in Cincinnati, and later he was made Professor of German in St. Xavier's College, serving till 1843. In that year he became Professor of Mathematics and Chemistry in St. John's College, Fordham, N. Y. In 1847 he returned to Cincinnati and studied law, and was admitted to the bar in 1849. In 1853 he was appointed judge of the Court of Common

Pleas. After serving two years he resigned to resume his law practice. In political life he was originally a Democrat, but he became a Republican during the contest over slavery in the Territories, and again became a Democrat to support Horace Greeley for the presidency. In 1885 he was appointed minister to Italy, which post he filled until 1889. After retirement to private life he resided in Italy. His published works include *General Principles of the Philosophy of Nature* (Boston, 1848); *Concepts and Theories of Modern Physics* (New York, 1882); and *Abhandlungen und Briefe* (1893).

Stanton, Thaddeus H., soldier, born in Indiana, Jan. 30, 1835; died in Omaha, Neb., Jan. 23, 1900. At the age of twenty-two he joined John Brown and Gen. James H. Lane, and engaged in nearly all the conflicts between the Free-State and Proslavery parties in 1857-'58. Later he was a press correspondent in the House of Representatives at Washington. At the outbreak of the civil war he enlisted as a private in the 3d Battalion, District of Columbia Volunteers, and served three months. He went to Iowa, and was elected to the Legislature. In August, 1862, he became a captain in the 19th Iowa Infantry, taking part in the campaigns in the border States. Later he was detailed for duty on the staff of Major-Gen. S. R. Curtis, and Dec. 19, 1862, became a paymaster attached to the Army of the Tennessee. Jan. 17, 1867, he was appointed major paymaster in the United States army; March 15, 1890, he was made lieutenant colonel in the department of the paymaster general; Jan. 22, 1893, he was promoted assistant paymaster general, with the rank of colonel; and March 27, 1895, was appointed paymaster general with the rank of brigadier general. Jan. 30, 1899, he retired. In 1871 he was a member of the board that adjusted the war claims of Kansas against the United States. In the following years he saw much hard service on the Western frontier. He was with Gen. Crook in the Black Hills expedition in 1875, and later became his chief of scouts in his operations against Sitting Bull, Crazy Horse, and other chiefs. He became known as the "Fighting Paymaster" on account of his insistence on a place in the line in the Indian outbreaks. He was brevetted lieutenant colonel of volunteers, March 13, 1865, and lieutenant colonel, United States army, Feb. 27, 1890.

Steinitz, William, chess player, born in Prague, Bohemia, May 14, 1836; died in New York city, Aug. 12, 1900. He was educated in his native city and at the Polytechnic School in Vienna. He early attained distinction as a chess player, and took prizes in tournaments in Vienna in 1859, 1860, and 1861. He went to England in 1862 as the Austrian delegate to an international tournament and won sixth prize, successfully playing with Anderssen and Paulsen. In 1866 he defeated Anderssen in an individual match, and the same year he took first prize in the handicap tournament of the British Chess Association. In 1870 he won a series from Blackburn, but was in turn defeated by Anderssen by half a game. In the London International Tournament of 1872 he won first prize and championship of the world. At the Vienna International Tournament of 1873 he made the greatest run on record, winning 16 straight games. In 1873 he settled in London, and for a time devoted himself to chess literature. In 1882 he removed to the United States. In 1883 he secured second prize at the London International Tournament; in 1886 he defeated Zukertort in a 10-game match in New York city; and in 1889 he won a best-out-of-20 match with Tschigorin in Havana. From 1885 till 1891 he was

editor of the *International Chess Magazine*. In December, 1890, he played with Gunsberg for the world's championship, defeating him on the 18th game. In 1894 and again in 1897 he met defeat at the hands of Emanuel Lasker, and from that time his mind began to fail. For a time he was confined in an asylum in Moscow, in which city the second match was held. He published *The Modern Chess Instructor* (New York, 1889).

Stembel, Roger Nelson, naval officer, born in Middleton, Md., Dec. 27, 1810; died in New York city, Nov. 20, 1900. He was appointed to the United States Naval Academy, March 27, 1832; became passed midshipman, June 23, 1838; promoted lieutenant, Oct. 26, 1843; commander, July 1, 1861; captain, July 25, 1866; commodore, July 13, 1870; and retired, Dec. 27, 1872; he was promoted rear-admiral retired, June 5, 1874. As midshipman he was stationed for a time at the depot of charts and instruments in Washington. From 1839 till 1842 he served on the frigate *Brandywine*, on the Mediterranean station. As lieutenant he was attached to the Coast Survey for several years. In 1849-'50 he served on the *Germantown*, and in 1851-'54 on the *Jamestown*. From 1855 till the outbreak of the civil war he served in various stations on the Mississippi and at the Naval Asylum. During the civil war he was in active service in the Mississippi flotilla, commanding the gunboat *Lexington*, and later the *Cincinnati*; he took part in the engagements at Lucas's Bend, Belmont, Fort Henry, and Island No. 10. May 10, 1862, he was severely wounded during the action with the Confederate rams at Craighead's Bend, near Fort Pillow, and disabled from further active service. In 1864 he was stationed at the recruiting rendezvous in Philadelphia. In 1866 he was in command of the sloop of war *Canandaigua*, attached to the Mediterranean squadron. He returned to the United States in 1867, and commanded the naval rendezvous at Boston in 1869, and the northern squadron of the Pacific fleet in 1871 and 1872.

Stillé, Alfred, physician, born in Philadelphia, Pa., Oct. 30, 1813; died there, Sept. 24, 1900. He was graduated at the University of Pennsylvania in 1832, and at the medical department in 1836. The same year he was elected resident physician of the Philadelphia Hospital, but resigned to continue his medical studies in Europe. In 1839 he returned and became resident physician of the Pennsylvania Hospital, serving till 1841. From 1854 till 1859 he was Professor of the Theory and Practice of Medicine in Pennsylvania Medical College; he occupied the same chair in the University of Pennsylvania from 1864 till 1884. From 1865 till 1871 he was also lecturer on clinical medicine in the Philadelphia Hospital. He was active in the formation of the American Medical Association, and was a member of various medical and scientific societies. The degree of LL.D. was conferred upon him by Pennsylvania College in 1876, and by the University of Pennsylvania in 1889. His writings include *Epidemic Meningitis* (Philadelphia, 1867); *Cholera* (1886); *Epidemic or Malignant Cholera*; *Therapeutics and Materia Medica*; *Elements of General Pathology*; *Humboldt's Life and Character*; *Medical Instruction in the United States*; *Unity of Medicine*; *War as an Element of Civilization*; and *National Dispensatory*, with John M. Maisch (1879).

Stockton, John Potter, lawyer, born in Princeton, N. J., Aug. 2, 1826; died in New York city, Jan. 22, 1900. He was graduated at Princeton College in 1843, and was admitted to the bar in 1847. Soon afterward he was appointed to revise and simplify the proceedings and practice in the courts of the State, and later he was State re-

porter in chancery. In 1857 he was appointed minister to Rome, and in 1861 was recalled at his own request. In 1865 he was elected United States Senator, but the validity of his election was questioned, and he was unseated, March 27, 1866. In 1869 he was again elected, and he served till 1875. He was appointed Attorney-General of New Jersey in 1877, and was re-elected in 1882, 1887, and 1892. He was a delegate at large to all the Democratic national conventions after 1864. He was also a delegate to the Unionist convention at Philadelphia in 1866. He received the degree of LL. D. from Princeton College in 1882. He published *Equity Reports*.

Stone, John Marshall, ex-Governor of Mississippi, born in Gibson County, Tenn., April 30, 1830; died in Holly Springs, Miss., March 2, 1900. In 1855 he removed to Mississippi. During the civil war he served in the Confederate army. In the battles around Petersburg he commanded a brigade. After the war he was station agent of the Memphis and Charleston Railroad at Iuka. He was mayor of Iuka and treasurer of Tishomingo County, Mississippi, but was removed from the latter office by military authority. In 1869 he was elected to the State Senate, and he served there continuously till 1876. When Gov. Ames resigned, in March, 1876, he became acting Governor, and in November, 1877, he was elected for a full term. In 1884 he was appointed Railroad Commissioner. In 1889 he was again elected Governor, and he served till 1895. At the time of his death he was president of Starkville Agricultural and Mechanical College.

Storrs, Richard Salter, clergyman, born in Braintree, Mass., Aug. 21, 1821; died in Brooklyn, N. Y., June 5, 1900. He was graduated at Amherst College in 1839, taught in Monson Academy



and Williston Seminary, and later entered the law office of Rufus Choate. But he gave up the study of law, entered Andover Theological Seminary, and was graduated there in 1845. His first pastorate was in Harvard Congregational Church, Brookline, where he was ordained, Oct. 22, 1845. In November, 1846, he was called to the Church of the Pilgrims, in Brooklyn, where he was pastor emeritus at the time of his death. He was one of the founders of the Independent in 1848, and remained one of its editors till 1861. From 1871 till 1879 he served on the Brooklyn Park Commission. In 1873 he was made president of the Long Island Historical Society. He was well known as an orator throughout the United States. He was president of the American Board of Commissioners for Foreign Missions in 1887-'97. The degree of D. D. was conferred on him by Union College in 1853 and by Harvard in 1859; that of LL. D. by Princeton in 1874, and L. H. D. by Columbia in 1887. His published works include a dozen occasional discourses, sermons, and orations, contributed to Broadway Tabernacle sermons (1860); *Introductory Essays to Punchard's View of Congregationalism* (Boston, 1860); *Kindling* (New York, 1856); *An Oration Commemorative of President Lincoln* (1869); *Conditions of Success in Preaching* (1875); *Early American Spirit and the Genesis of it* (1875); *John Wyckliffe and the First English Bible* (1880); *Recognition of the Supernatural in Letters and Life* (1881); *Manliness in*

the Scholar (1883); *The Psalter* (1883); *The Divine Origin of Christianity* (1884); *The Prospective Advance of Christian Missions* (1885); *Forty Years of Pastoral Life* (1886); *Declaration of Independence* (1886); *The Broader Range and Outlook of the Modern College Training* (1887); *Puritan Spirit* (1889); and *Bernard of Clairvaux* (1892).

Strong, William L., merchant, born in Loudonville, Ohio, March 22, 1827; died in New York city, Nov. 2, 1900. He was a dry-goods clerk in Wooster and Mansfield, Ohio, till 1853, when he removed to New York city to engage in similar business. In 1863 he became a member of the firm of Sutton, Smith & Co., and in 1870 the firm's name was changed to William L. Strong & Co. Mr. Strong was the organizer of business men's clubs in several presidential campaigns, and in 1882 was an unsuccessful candidate for Congress on the Republican ticket. In 1894 he was elected mayor of New York by a combination of Republicans and Anti-Tammany Democrats, and he served till January, 1898. For portrait, see *Annual Cyclopædia* for 1894, page 536.

Stryker, William Scudder, lawyer, born in Trenton, N. J., June 6, 1838; died there, Oct. 29, 1900. He was graduated at Princeton College in 1858. In 1861 he assisted in raising the 14th New Jersey Regiment; served on Major-Gen. Gillmore's staff, and distinguished himself at the capture of Morris island and in the night assault on Fort Wagner, and was brevetted lieutenant colonel. Later he was made paymaster at Parole Camp, Columbus, Ohio. He was attached to the staff of Gov. Ward of New Jersey, and, April 12, 1867, was made brigadier general in the State Guard and adjutant general. In 1874 he was brevetted major general. He was admitted to practice at the bar in 1866. He was devoted to historical research, and published *Official Register of the Officers and Men of New Jersey in the Revolutionary War* (Trenton, 1872); *Roster of the New Jersey Volunteers in the Civil War* (1872); *Washington's Reception by the People of New Jersey in 1789* (1882); *Gen. Maxwell's Brigade of the New Jersey Continental Line* (1885); *The New Jersey Volunteers* (1887); *The Affair at Egg Harbor* (1894); *The Continental Army at the Crossing of the Delaware River* (1896); and *The Battles of Trenton and Princeton* (Boston, 1898).

Sullivan, Timothy, soldier, born in Cork, Ireland, April 14, 1820; died in Oswego, N. Y., April 21, 1900. About 1850 he removed to Oswego, where he had a shoe store. He was captain of the Oswego Guard thirteen years. When the civil war broke out he was commissioned colonel of the 24th New York Regiment. At the battles of Bull Run and South Mountain he was brigade commander, and he was made brigadier general for gallantry. Later he was detailed on recruiting service. He also served a year as president of the examining board of the 1st Army Corps.

Tasker, Stephen P. M., mechanical engineer, born in Philadelphia, Pa., Dec. 21, 1834; died there, March 19, 1900. In early youth he served in the pattern shop and drawing room of the firm of which his father was a member, and at the age of twenty-one he was taken into partnership. Under his supervision the Newcastle Iron Works were constructed. He perfected and patented several important mechanical inventions.

Tavares, Morton, actor, born in Kingston, Jamaica, in 1821; died there, June 15, 1900. He made his first appearance at the age of eleven with a company that visited his native place. A few years later he went to New York and secured an engagement under the name of Tavares Mor-

ton. He was for several years a useful member of stock companies in the United States and Canada, and finally he became one of William E. Burton's players in the Chambers Street Theater. During the civil war he was a member of Harry Crisp's company in the South. In 1870 he went to London, where he played at Sadler's Wells Theater. During this engagement he resumed the use of his real name. From London he went to Australia, where for twelve years he was a very successful actor and manager. His last appearance was in Kingston, where a few months before his death he played Shylock.

Taylor, George Yardley, a missionary of the Presbyterian Board, born in Taylorsville, Pa., May 18, 1862; killed in Paoing-Fu, Chi-Li province, China, June 30, 1900. Dr. Taylor was graduated at Princeton in 1882, and at the University of Pennsylvania, medical department, in 1885. He was sent to China, Nov. 15, 1886.

Thompson, Richard Wigginton, lawyer, born in Culpeper County, Virginia, June 9, 1809; died in Terre Haute, Ind., Feb. 9, 1900. In 1831 he removed to Louisville, Ky., where he became a clerk in a store. Later he went to Lawrence County, Indiana, where he was admitted to the bar in 1834. The same year he was elected to the Legislature, serving two terms. In 1836 he was elected to the State Senate. In 1840 he was an elector on the Harrison and Tyler ticket, and in 1841 was elected to Congress. In 1843 he began the practice of law in Terre Haute. In 1847 he was again elected to Congress. He was appointed minister to Austria in 1849, and later President Fillmore appointed him general solicitor of the Land Office, but he declined both places. During the civil war he was in charge of a recruiting post near Terre Haute, and was provost marshal of the district. In 1867 he was appointed judge of the Fifth Indiana Circuit, serving two years. He was also for one term collector of internal revenue. In 1877 he became Secretary of the Navy, but he retired in 1881, before the expiration of his term of office, to become chairman of the American committee of the Panama Canal Company. He published *The Papacy and the Civil Power* (New York, 1877); *The History of the Protective Tariff* (Chicago, 1888); *Footprints of the Jesuits* (New York and Boston, 1894); and *Recollections of Sixteen Presidents, from Washington to Lincoln* (2 vols., Indianapolis, 1894).

Tower, Zealous Bates, soldier, born in Cohasset, Mass., Jan. 12, 1819; died there, March 21, 1900. He was graduated at West Point in 1841, and entered the engineer corps as second lieutenant; was promoted first lieutenant, April 24, 1847; captain, July 1, 1855; major, Aug. 6, 1861; lieutenant colonel, Nov. 11, 1865; colonel, Jan. 13, 1874; and retired, Jan. 10, 1883. In the volunteer service he was commissioned brigadier general, Nov. 23, 1861; brevetted major general, June 12, 1865; and mustered out, Jan. 15, 1866. From 1843 till 1846 he was engaged in the construction of the defenses about Hampton Roads. As lieutenant he served with a battalion of engineers in the Mexican War, and was recommended for gallantry at Cerro Gordo, Contreras, and Chapultepec. From 1848 till 1861 he was employed in the construction of defenses on the Pacific coast. During the civil war he conducted the defense of Fort Pickens, Florida, Nov. 23, 1861, took part in the first battle of Bull Run, and also participated in the campaigns of Gens. Banks and Pope in northern Virginia. At the second battle of Bull Run he received a wound that incapacitated him for duty at the front, and he was brevetted major general for gallantry in that action. For a while in 1864

he was superintendent at West Point. He again went to the front, and took part in the battle of Nashville. After the war he was on duty in the regular army, for a time in the West and later in New York.

Tyler, Moses Colt, author and clergyman, born in Griswold, Conn., Aug. 2, 1835; died in Ithaca, N. Y., Dec. 28, 1900. He was graduated at Yale University in 1857, and studied theology at Yale and at Andover. He was pastor of the First Congregational Society, in Poughkeepsie, N. Y., in 1860-'62, and Professor of English in the University of Michigan in 1867-'81. In 1881 he was ordained deacon in the Episcopal Church, and two years later was admitted to priest's orders. He, however, never took up parochial duties, his time being devoted to teaching and to literary work. On leaving the University of Michigan he became Professor of American History at Cornell University, and he occupied that chair at the time of his death. The character of his work closely allied him to the best type of English clerical scholars. He had planned a complete history of American literary development on a very broad scale, but had published only four volumes of the work. His writing displays great charm of style, his admirable English being adorned with both wit and humor. His literary judgments are well weighed, while his fine sense of literary perspective is almost never at fault. His published books include *The Brawnville Papers* (Boston, 1867); *History of American Literature during the Colonial Period* (1878; revised, 1890); *Manual of English Literature* (1879); *Life of Patrick Henry* (1887); *Three Men of Letters* (1895); *The Literary History of the American Revolution* (1897); and *Glimpses of England: Social, Political, and Literary* (1898).

Van Lew, Elizabeth, postmistress and department clerk, born in Richmond, Va., in 1827; died there, Sept. 25, 1900. She was the daughter of John Van Lew, a wealthy New Yorker, who for many years was a hardware merchant in Richmond. She was a Union woman all through the civil war, and made use of her intimacy with the family of Jefferson Davis to secure much valuable information relative to the Confederate army, which she sent through the lines to the Federal authorities. March 19, 1869, she was appointed postmistress of Richmond by President Grant, and she was reappointed four years later, and held the office till May 19, 1877. In 1883 she was appointed to a clerkship in the third assistant postmaster general's department, which she held till 1887, when she resigned rather than accept a reduction to an inferior clerkship.

Villard, Henry, financier, born in Speyer, Rhenish Bavaria, April 11, 1835; died in Dobbs Ferry, N. Y., Nov. 11, 1900. He came to the United States in 1853, after studying in the schools in Zweibrucken, Speyer, and Phalsburg. His name was Heinrich Hilgard, his father being Gustav Hilgard, a judge of the Supreme Court in Munich. The father's opposition to his son's departure caused the latter to adopt the surname of a French schoolmate, and he became Henry Villard. He spent the winter of 1854-'55 on an uncle's farm in Belleville, Ill., where he contributed to the local papers. He next read law in Peoria, and then went to Chicago, where he became a newspaper correspondent. In 1858 he reported the Lincoln-Douglas debate for Eastern newspapers. In 1860 he attended the convention that nominated Abraham Lincoln, and in the campaign that followed was a correspondent of the New York Herald. During the civil war he achieved a wide reputation as a war correspondent, and for a time he conducted a correspondent's bureau in Wash-

ington. In 1866 he was sent by the New York Tribune to report the Austro-Prussian War, but was too late in the field. He remained abroad to report the Paris Exposition of 1867. Before going abroad he married a daughter of William Lloyd Garrison. From 1868 till 1871 he was secretary of the Social Science Association in Boston. He resigned in 1871 to travel in Germany. He returned to this country in 1873, and bought for the German bondholders the property of the Oregon and California Railroad Company and the Oregon Steamship Company. He also became a member of a Frankfort committee of Kansas Pacific Railroad bondholders, and in 1875, with C. S. Greeley, of St. Louis, became receiver of the property. By means of a so-called blind pool of \$20,000,000 he formed the Oregon and Transcontinental, which acquired control of the Oregon Railway and Navigation Company and the Northern Pacific, and in September, 1881, he was elected president of the Northern Pacific. In 1884 the companies in which he was interested became so involved that there was a collapse, in which he suffered heavily. Mr. Villard returned to Germany, where he formed new financial relations which enabled him to repair his fortunes, and in three years came back to the United States. In October, 1889, he became chairman of the Board of Directors of the Northern Pacific, which place he held until the panic of 1893. He gave aid to Edison, the inventor, and in 1890 he purchased from the latter the Edison Lamp Company of Newark and the Edison Machine Works at Schenectady, from which he organized the Edison General Electric Company, serving as its president for two years. In 1881 he purchased a controlling interest in the Evening Post and the Nation, and placed Edwin L. Godkin and Horace White at their head. Mr. Villard made many gifts to educational and charitable institutions.

Vincent, James, actor, born in Dublin, Ireland, in 1846; died in Brooklyn, N. Y., Aug. 12, 1900. He made his first appearance at the old Olympic Theater, New York, Jan. 2, 1874, and was for several years a member of the vaudeville company which occupied that house. June 6, 1879, at the Lyceum Theater, New York, he began a long engagement with Rice's Evangeline, in which he played King Boorobola Gah. Oct. 12, 1880, he began an engagement with Henry Jarrett's company, playing Cinderella at Booth's Theater, New York. In the season of 1884-'85 he was a member of H. C. Miner's Silver King company. From 1886 to 1890 he supported Pat Rooney in the latter's plays, and for the later years he was a member of Andrew Mack's company. His last appearance was in the rôle of Andy McCue in *The Rebel*, at Providence, May 19, 1900.

Wallace, Robert B., soldier, born in Illinois; died at Fort Huachuca, Arizona, March 13, 1900. He was graduated at West Point, June 12, 1890, and assigned to the 2d Cavalry as second lieutenant; promoted first lieutenant, Jan. 4, 1897. In the war with Spain he assisted in the organization of the 1st Montana Volunteers, was commissioned lieutenant colonel of that regiment, and accompanied it to the Philippines. He was severely wounded in the action at Caloccan, Feb. 10, 1899. He was made brevet colonel of volunteers and brevet captain and major, United States army, for services at the battles in front of Manila, Feb. 5 and 10, 1899, and at the crossing of the Rio Grande de la Pampagna, April 27, 1899. Later he was appointed colonel of the 37th Regiment, United States Volunteer Infantry, which he commanded till Sept. 25, 1899, when he was compelled to return to the United States on sick leave.

Walworth, Clarence Alphonsus, clergyman, born in Plattsburg, N. Y., May 30, 1820; died in Albany, N. Y., Sept. 19, 1900. He was the eldest son of Chancellor Walworth, and was graduated at Union College in 1838. After studying law he practiced his profession in Rochester a few years, and then entered the General Theological Seminary of the Episcopal Church in New York city, but before completing his studies he became a Roman Catholic and entered the order of Redemptorists. He studied for the priesthood in Belgium, and then, after two years of church work in England, he returned to the United States. With Father Hecker and others he founded the order of Paulists in 1858. He was subsequently transferred to the secular priesthood, and after serving for a short time as pastor of Saint Peter's Church, Troy, N. Y., assumed in 1868 the charge of Saint Mary's Church, Albany, and was its pastor at the time of his death. He was active in the temperance cause, was a practical geologist, and was especially well versed in the geology of his native State. He published *The Gentle Skeptic*, *The Doctrine of Hell*, and *Andiatorocte* (1888).

Warner, Charles Dudley, author, born in Plainfield, Mass., Sept. 12, 1829; died in Hartford, Conn., Oct. 20, 1900. His father, Justus Warner, who was of Puritan stock and a man of culture, died when Charles was four years of age. Charles inherited his father's taste for literature, but in his early boyhood he had access only to Calvinistic treatises, biblical commentaries, and the biographies of austere divines. At the age of twelve he became a member of his uncle's household at Cazenovia, Madison County, N. Y., and there he pursued his classical studies until he entered Hamilton College, Clinton, N. Y., at which institution he was graduated in 1851, having won the first prize in English. While an undergraduate he had contributed to *The Knickerbocker* and *Putnam's Magazine*. Shortly after leaving college he prepared *A Book of Eloquence*, a compilation for the use of school children, which displayed his keen critical judgment. Although his inclinations were toward a literary career, he spent a year, 1853-'54, with a surveying party on the Missouri frontier. On his return to the East he entered the law school of the University of Pennsylvania, where he was graduated in 1856, and began the practice of his profession in Chicago. He married in that year Susan, daughter of William Eliot Lee, of New York, who survives him. In 1860, at the solicitation of Gen. Joseph R. Hawley, who had known him at school and college, Mr. Warner took up his residence in Hartford, Conn., to aid in the publication of the Press, a Republican evening newspaper. When Gen. Hawley went to the front in the following year Mr. Warner assumed control of the paper. In 1867 the press was consolidated with the *Courant*, a morning journal, of which Mr. Warner became part owner. He had traveled extensively in this country when, in 1868, he first went to Europe, remaining there for fourteen months. His bright and entertaining letters to the *Courant* won instant success, and were widely quoted. Mr. Warner's writings as a tourist are among his most popular works. He spent a large part



of his life in wanderings through the United States, Mexico, Europe, and the Orient, and his keenness of observation, charm of style, and ever-present humor will give his books of travel a permanent place in their class. My Summer in a Garden, the book that first brought fame to Mr. Warner, appeared in 1870. It was made up of a series of papers that had appeared in the *Courant*, and the public at once recognized the fascination of its gentle humor and sane philosophy. In 1877 Mr. Warner's *Being a Boy*, a realistic and amusing picture of rural life in a Calvinistic New England community, was published, and added much to the reputation that he had already won from his *My Summer in a Garden* and *Backlog Studies*, published in 1872. In 1884 Mr. Warner became co-editor of *Harper's Magazine*, and for many years he conducted the *Editor's Drawer*, a department of the magazine, and was for a time in charge of the *Editor's Study*. Several of his books were published serially in the magazine, and he was a frequent contributor of essays, stories, and sketches of travel. Mr. Warner's was a many-sided nature, his points of contrast with life being more numerous than is usual with the professional man of letters. The late George William Curtis, referring to American authors, asks: "Shall they be stoled priests ministering always at the high altar, with their gorgeous backs to the people, or apostles going into many lands and homes, bearing gifts of healing for the sorrows and wants of to-day?" For the relief of these sorrows and wants Mr. Warner strove not only in words, but in deeds. The education of the Southern negro and the reform of abuses in our prisons were incentives to much of the activity of his latter years. The reader of Mr. Warner's works can not fail to be impressed by the author's common sense, a misnamed quality that served him well in his untiring endeavors as a social scientist. Bookish and scholarly although he was, he was also a practical man of affairs, as is proved by the many places of honor and trust that he occupied. Mr. Warner was a vice-president of the Egypt Exploration Fund of England, a member of the Park Board of Hartford, Conn., one of the Connecticut Commission on Sculpture, and a trustee of the Wadsworth Athenæum. He was a member of the Century, the Authors', and the Players' Clubs of New York, the Authors' and the Tavern Clubs of Boston, and the Colonial Club of Hartford. He was a vice-president of the National Prison Congress, and president of the American Social Science Association. He received the degree of A. M. from Yale in 1872, and from Dartmouth and Hamilton in 1884. Hamilton gave him the degree of L. H. D. in 1886, and Princeton conferred the same degree in 1896. He received the degree of D. C. L. from the University of the South in 1889. The list of Mr. Warner's published works is as follows: *A Book of Eloquence* (1853); *My Summer in a Garden* (1870); *Saunterings* (1872); *Backlog Studies* (1872); *The Gilded Age* (with S. L. Clemens, 1873); *Baddeck*, and *That Sort of Thing* (1874); *Mummies and Moslems* (1876; reissued under the title *My Winter on the Nile*); *In the Levant* (1877); *Being a Boy* (1877); *In the Wilderness* (1878); *The American Newspaper* (1879); *Studies of Irving* (with W. C. Bryant and George P. Putnam, 1880); *Life of Washington Irving* (1881); *edited American Men of Letters*, of which his Irving was the initial volume; *Captain John Smith*, *Sometime Governor of Virginia* and *Admiral of New England: A Study of his Life and Writings* (1881); *A Roundabout Journey* (1883); *Papers on Penology* (with

others; Reformatory Press, Elmira, N. Y., 1886); *Their Pilgrimage* (1886); *On Horseback: A Tour in Virginia, North Carolina, and Tennessee*, Published with *Notes of Travel in Mexico and California* (1888); *Studies in the South and West, with Comments on Canada* (1889); *A Little Journey in the World: A Novel* (1889); *Looking Forward: The Dual Government Realized* (1890); *Our Italy, Southern California* (1890); *As We Were Saying* (1891); *Washington Irving* (1892); *The Work of Washington Irving* (1893); *As We Go* (1893); *The Golden House: A Novel* (1894); *The Relation of Literature to Life* (1896); and *The People for Whom Shakespeare Wrote* (1897). He edited *A Library of the World's Best Literature* (1890-'98).

Watson, James Madison, author, born in Onondaga Hill, N. Y., Feb. 8, 1827; died in Elizabeth, N. J., Sept. 29, 1900. At the age of sixteen he was teaching in a district school in Oswego County, New York. He gave up teaching to study law, and in 1853 was admitted to the bar at Albany, N. Y. Later he became connected with the publishing house of A. S. Barnes & Co., and was the author of many of their school text-books. Among his published works are a notable series of readers, with Richard Green Parker (1858); *The Complete Speller* (1878); *Handbook of Calisthenics and Gymnastics* (1879); and *The Graphic Speller* (1884).

Wells, Henry Horatio, lawyer, born in Rochester, N. Y., Sept. 17, 1823; died in Palmyra, N. Y., Feb. 12, 1900. He was educated at Romeo Academy, Michigan, studied law in Detroit, and was admitted to the bar in 1846. From 1854 till 1856 he was a member of the Michigan Legislature. In September, 1862, he became colonel of the 26th Michigan Regiment. In February, 1863, he was made provost marshal general of the defenses south of the Potomac, which office he held till the close of the war. In May, 1865, he was brevetted brigadier general of volunteers. After the assassination of President Lincoln he took part in the investigation that preceded the capture of the conspirators, and was associate counsel in the proceedings against Jefferson Davis for treason. Late in 1865 he settled in Richmond, and, April 16, 1868, was appointed Provisional Governor of Virginia. In 1869 he was defeated as the Republican candidate for Governor of the State under its new Constitution. In 1871-'72 he was United States attorney for the eastern district of Virginia, and from 1875 till 1880 was United States attorney for the District of Columbia.

Westlake, William, inventor, born in Cornwall, England, in 1831; died in Brooklyn, N. Y., Dec. 28, 1900. He came to the United States in 1847, and worked as a roller boy in the office of *The Evening Wisconsin*, Milwaukee. Later he served an apprenticeship as a tinsmith. He was employed by Capt. Ericsson to make the patterns and models for his first hot-air engine. Later he entered the employ of the La Crosse and Milwaukee Railroad Company, and there began the series of inventions that made him famous. These include the Westlake car heater, which dumps the fire in case of accident; the globe lantern, patented in 1862; the oil cook stove in 1865; and the stove board in 1869. The first practical car lamp was perfected by him in 1873. He retired with a competency in 1883, from which time he lived in Brooklyn; while in retirement he invented several articles of general utility.

Willey, Waitman T., lawyer, born in Monongalia County, West Virginia, Oct. 18, 1811; died in Morgantown, W. Va., May 2, 1900. He was graduated at Madison College in 1831, and was

admitted to the bar in 1833. In 1841 he was made clerk of the county court of Monongalia County, and later was clerk of the circuit court. In 1850 he was a member of the Virginia Constitutional Convention. He was a delegate to the State convention that met in Richmond in February, 1861, and after the adoption of the ordinance of secession, he was elected to the Unionist Legislature at Wheeling. He was a member of the convention that decided to create the State of West Virginia, and was chosen to represent that State in the United States Senate, taking his seat Dec. 3, 1863; in the following year he was re-elected. He served on the Committees on Naval Affairs, the District of Columbia, and Engrossed Bills, and was chairman of the Committee on Patents and the Patent Office. The degree of LL. D. was conferred on him by Allegheny College in 1863.

Williams, George L., a missionary of the American Board, born in Southington, Conn., Oct. 4, 1858; killed in Taku, Shensi province, China, July 31, 1900. He was graduated at Oberlin College in 1888, and at the Theological Seminary in 1891, and went to China July 29 of the same year.

Williams, Thomas A., botanist, born in Fremont County, Iowa, Nov. 25, 1865; died in Takoma Park, D. C., Dec. 23, 1900. He was graduated at the University of Nebraska in 1889, and became a teacher. In February, 1891, he was appointed assistant botanist in the Agricultural College of South Dakota; he was promoted head of the botanical department, and remained there as Professor of Botany six years. In August, 1896, he was made assistant chief in the division of agrostology of the United States Department of Agriculture, which place he held at his death. In addition to his department work he had charge of the classes in botany at Columbian University. In 1899 he became editor in chief of the *Asa Gray Bulletin*. He was the author of many articles on botany and horticulture.

Wilmer, Richard Hooker, clergyman, born in Alexandria, Va., March 15, 1816; died in Spring Hill, Ala., June 14, 1900. He was graduated at Yale University in 1836, and studied for the Episcopal ministry, being admitted to the priesthood in 1840. Until his elevation to the episcopate he was rector of the following Virginia parishes successively: St. Paul's, Goochland County, and St. John's, Fluvanna County, 1830-'43; Grace and Wickliffe, Clark County, 1844-'49; Emmanuel, Loudon County, and Trinity, Fauquier County, 1850-'53; St. Stephen's and Trinity, Bedford County, 1855-'58; Emmanuel, Henrico County, 1858-'62. He was consecrated Bishop of Alabama in March, 1862, but as his election and consecration took place during the civil war, when the Southern dioceses were organized as a separate church, he was received into the episcopate of the Church in the United States in 1865 only after signing an equivalent to the promise of conformity prescribed in the ordinal. When Gen. Thomas issued an order closing all churches in Alabama till Bishop Wilmer should direct the use of the prayer for the President of the United States, the bishop protested that this was secular interference with religious liberty, and declared that he would never use the prayer till the interference ceased. He appealed to higher authorities in turn, including the President of the United States, and finally secured a revocation of the order. The matter, as he contended, was not a question of his loyalty or disloyalty, but concerned the larger issue of religious liberty. He published *The Recent Past from a Southern Standpoint* (1887) and a *Guide-book for Young Churchmen*.

Wilson, George Washington, lawyer, born in Preble County, Ohio, Sept. 13, 1843; died in Washington, D. C., Nov. 27, 1900. He enlisted as a private in the 54th Ohio Volunteers in 1861, served through the war, and was mustered out as first lieutenant. In 1860 he was admitted to the bar and began practice. He served two terms as prosecuting attorney of Madison County, one term in the lower house of the Ohio Legislature, and one in the State Senate. From 1869 till his death he was engaged in the internal revenue service in various capacities; in 1869 he was made gauger for the third district of Ohio; in 1889 he was appointed deputy commissioner for the United States, and in January, 1899, he was appointed commissioner of internal revenue.

Wilson, John Wall, naval officer, born in 1832; died in Brooklyn, N. Y., Aug. 21, 1900. He was graduated at Annapolis and entered the navy. In 1853 he joined the Kane arctic expedition for the relief of Sir John Franklin. He was navigator of the expedition, and after their ship, the *Advance*, had been beached in Kane Basin, he led a detached expedition into the interior of Greenland. The cold was so severe that he lost part of one foot. The *Advance* was crushed by an iceberg, and the party returned to the open sea in small boats. He served through the civil war, and took part in the capture of New Orleans. At the close of the war he resigned from the navy, and engaged in commercial pursuits.

Wilson, William Lyne, educator, born in Jefferson County, Virginia, May 3, 1843; died in Lexington, Va., Oct. 17, 1900. He was graduated at Columbian College in 1860, and took a post-graduate course at the University of Virginia. In the civil war he served as a private in the 12th Virginia Cavalry. From 1865 till 1871 he was Professor of Ancient Languages in Columbian College, and at the same time studied law. He was admitted to the bar in 1867. When the test oath for lawyers was abolished in West Virginia, he entered upon practice in Charlestown. He was a delegate to the Democratic National Convention in 1880, and in the same year was elector at large for West Virginia. In September, 1882, he was elected president of the University of West Virginia, and in the same month he was elected to Congress. He resigned the presidency of the university in June, 1883. He was re-elected to Congress five times in succession, but was defeated in 1894. He was a member of the Committee of Ways and Means in 1888, during the agitation over the Mills tariff bill, and took part in the debate on that measure. When the Democrats regained control of the House of Representatives in 1893 he was made chairman of the Committee of Ways and Means, and as such was responsible for the tariff bill that became a law in 1894. In 1895 he was appointed Postmaster-General, serving two years. In July, 1897, he became president of Washington and Lee University, and he held that office at the time of his death. Mr. Wilson also served from 1884 till 1887 as a regent of the Smithsonian Institution. He received the degree of LL. D. from Columbian University in 1883, and from Hampden Sidney College in 1886.

Wing, Josiah Norris, librarian, born in Bedford County, Virginia, Sept. 29, 1848; died in New York city, Dec. 20, 1900. His father, a native of Maine, was a bridge builder, and constructed some of the finest bridges in the South. He was a Union man, and after the siege of Knoxville (in the winter of 1863-'64) he removed to New York city. There the son was prepared for college, but instead of entering he became a clerk in the Mercantile Library, where he rose by promotion to

the place of assistant librarian, and where he spent thirteen years. At the end of that time he entered the house of Charles Scribner's Sons as an expert at the head of the library department. Here he carried on an extensive system of correspondence with the managers of small libraries in all parts of the country, who constantly sought his advice as to the choice and purchase of books. His knowledge of books was extensive, intimate, and accurate, not of the titles only, but of the character and contents as well, and of their rank as authorities. On one occasion the proprietor of a large publishing



house told him that a customer had asked for the best books on a certain subject, but neither he nor any of his clerks could tell what they were or where they were to be had. Mr. Wing immediately gave the titles of the books required, and added, "You published them yourself, in such and such a year," mentioning the exact dates. In May, 1899, he was appointed chief librarian of the Free Circulating Libraries of New York city. He was a founder of the Booksellers' League, and was active in the work of the Good Government clubs and the Citizens' Union. He lived and died in the house that was the home of Mrs. Parton (Fanny Fern) in her last years.

Wingard, Henry S., theologian, born in 1844; died in Springfield, Ga., Dec. 1, 1899. He was educated at Newberry, S. C., and labored for many years in various Lutheran parishes in South Carolina and Georgia. Newberry College conferred on him the degree of D.D. He was a contributor to the Church periodicals and held many places of honor and trust in the synods to which he belonged. At the time of his death he was vice-president of the United Synod of the South and president of the Board of Directors of the Lutheran Theological Seminary at Mount Pleasant, Charleston, S. C.

Wise, Isaac Mayer, rabbi, born in Steingrub, Bohemia, April 3, 1819; died in Cincinnati, Ohio, March 26, 1900. He was graduated at the University of Prague and at the Jewish Theological Seminary there, and took charge of a congregation in Radnitz, Bohemia. He came to the United States in 1846. His first charge was the Congregation Beth El, at Albany, N. Y. He also opened a school in that city for the purpose of Americanizing the Jews. He attempted to reform Judaism, and, on account of his utterances, was compelled by the orthodox element to withdraw from his Albany charge. He then founded an independent congregation. In April, 1854, he removed to Cincinnati to take charge of the Congregation B'nai Jeshurun, which place he held until his death. In July, 1854, he established the Israelite, now called the American Israelite, a weekly paper, and in 1855 *Die Deborah*, a German weekly. In 1873 he was largely instrumental in the organization of the Union of American Hebrew Congregations. He established the Hebrew Union College, from which the first class was graduated in 1883. After many vain efforts to establish a synod, he finally succeeded in 1889 in organizing the Central Conference of American Rabbis, which meets annually. He served six years on

the Cincinnati school board. His published works include *Combat of the People*; *First of the Maccabees*; *History of the Jews of the First Commonwealth*; *Essence of Judaism* (1860); *Prayer-book and Book of Hymns* (1868); *Origin of Christianity* (1870); *Judaism, its Doctrines and Duties* (1872); *The Martyrdom of Jesus of Nazareth* (1874); *The Cosmic God* (1876); *The History of the Hebrews' Second Commonwealth* (1880); *Moses, the Man and the Statesman* (1883); *Judaism and Christianity: Their Agreements and Disagreements* (1883); *A Defense of Judaism versus Proselytizing Christianity* (1889); and *Pronaos to Holy Writ* (1891).

Wittenmyer, Annie (Turner), reformer, born in Sandy Springs, Ohio, Aug. 26, 1827; died in Sanatoga, Pa., Feb. 2, 1900. She was the daughter of John G. Turner, and in 1847 married William Wittenmyer. In 1850 she removed to Keokuk, Iowa, where she engaged in charity work and opened a free school. When the civil war broke out she became Iowa's volunteer agent to distribute supplies, and she was the first sanitary agent of the State elected by its Legislature. She was under fire at Pittsburg Landing and Vicksburg. She introduced a special diet kitchen in army hospitals, for which she was commended by President Lincoln. In 1863 she established the Soldiers' Orphans' Home in Davenport, Iowa, and later was a promoter of the Pennsylvania Memorial Home for Soldiers. She was the first president of the Woman's Christian Temperance Union, and also a prominent member of the Woman's Relief Corps. She was the founder of the Christian Woman, and also the Christian Child, and served for a time as associate editor of *Home and Country*. She published *Handbook of the Woman's National Christian Temperance Union* (1878); *History of the Woman's Christian Temperance Crusade* (1882); *Women of the Reformation* (1885); and *Under the Guns* (1895).

Wolcott, Roger, lawyer, born in Boston, Mass., July 13, 1847; died there, Dec. 21, 1900. He was a great-grandson of Oliver Wolcott, one of the signers of the Declaration of Independence and a Governor of Connecticut. He was graduated at Harvard University in 1870, being the orator of his class, and at Harvard Law School in 1874. The same year he was admitted to the bar. He practiced law but little, his time being chiefly occupied with his duties as trustee of various estates. He was a member of the city council from 1877 till 1879. In 1882 he was elected to the Legislature, serving three terms, and there he won distinction both for his constructive ability and his oratorical talents. He was a Republican in politics, but in 1884 he supported the nomination of Grover Cleveland for the presidency. In 1885, however, he was recognized by the Boston Republicans and sent as a delegate to the State convention. From 1893 till 1896 he was Lieutenant Governor of Massachusetts, and he became Governor after the death of Gov. Greenhalge, March 5, 1896. In November, 1896, he was elected Governor, and in 1897 and 1898 was re-elected. In 1899 he was offered the ambassadorship to Italy, but declined it. He was the first president of the Massachusetts Republican Club, an overseer of Harvard University, and a trustee of the Massachusetts General Hospital. He received the degree of LL. D. from Williams College. See portrait in the *Annual Cyclopædia* for 1897, page 501.

Wood, Benjamin, journalist, born in Shelbyville, Ky., Oct. 13, 1820; died in New York city, Feb. 21, 1900. He received a common-school education. When a young man he shipped as a sailor

and led an adventurous life till he finally settled in business in New York city. In a few years he accumulated a fortune. In the presidential campaign of 1800 he bought the New York Daily News, and used it in support of Stephen A. Douglas. Mr. Wood was elected to Congress in 1860 and 1862. He was what was termed a Copperhead, and as such was offensive to the Union men. The issue of the Daily News was suppressed by the Federal authorities from December, 1861, till May, 1863. In 1866 he was elected to the New York State Senate. In 1880 he was again elected to Congress. In April, 1867, he changed the Daily News from a morning to an evening paper, and in 1870 he began the German Daily News, and in 1872 the German Sunday News. These papers had a long career of prosperity. In November, 1898, he sold his stock to his wife, but continued to perform the duties of editor in chief till a week before his death.

Young, Alfred, clergyman, born in Bristol, England, in 1831; died in New York city, April 4, 1900. He was graduated at Princeton College in 1848, and at the medical department of the University of New York in 1852. In 1850 he embraced the Roman Catholic faith. He practiced medicine for a year, and in 1853 went to Paris, where he studied for the priesthood at the Seminary of St. Sulpice. He was ordained a priest in St. Patrick's Cathedral, Newark, N. J., Aug. 24, 1856. In 1857 he was vice-president of Seton Hall College; he was afterward rector of the Roman Catholic Church at Princeton, and later at Trenton. In 1861 he was received as a member of the newly founded Paulist community, and became a missionary of great zeal. He was a musician, and composed many devotional hymns; he was enthusiastic in restoring the Gregorian chant for the entire services of the Roman Catholic Church, and trained a choir of men and boys to render it in the Church of St. Paul the Apostle in New York city. He was the author of *The Complete Sodality Hymn Book* (New York, 1863); *The Office of Vespers* (1869); *The Catholic Hymnal* (1884); *Carols for a Merry Christmas and a Joyous Easter* (2 vols., 1885-'86); *Catholic Hymns and Canticles* (1888); and *Catholic and Protestant Countries Compared* (1895).

OBITUARIES, FOREIGN. **Acland, Sir Henry**, an English sanitarian, born in 1815; died in Oxford, Oct. 16, 1900. He was a younger son of a baronet of ancient family, and was sent to Harrow and Christ Church, Oxford, where he took the degree of doctor of medicine in 1840. He was elected a fellow of All Souls, was reader in anatomy at Christ Church from 1845 to 1854, and in conjunction with Prof. Beale gathered the collection of physiological studies that now forms part of the university museum which he and Dean Liddell brought into existence. When the School of Natural Science was founded he was chosen an examiner, an easy office until the study of science took root in Oxford. In 1857 he succeeded Dr. Ogle in the medical professorships of the university, the clinical and the regius. He was also Radcliffe librarian and curator of the Bodleian Library and of the university galleries, being himself an artist. As an expert in sanitary science he was appointed a member of the Royal Sanitary Commission in 1869, having previously worked on the Cubic Space Commission. In the British Medical Association, the Social Science Congress, and the British Association he took a prominent part. He accompanied the Prince of Wales on his visit to America, and was president of the General Medical Council in 1874-'87. He published a tract on Village Health, and con-

tributed many articles to the press on hygienic and sanitary questions. He took an active interest in sending female physicians to India, in the public health of Egypt, and in medical missions in Asia and Africa.

Adenis de Colombeau, Jules, a French dramatist, born in Paris, June 28, 1823; died there in 1900. He was educated at the Collège Bourbon, and entered upon a mercantile career, which he soon abandoned for dramatic writing. His first work was a piece in one act, *Le Fils du Bonnetier*, played at the Théâtre Comté, Paris, in 1841. He wrote generally in collaboration with others, and the titles of his principal works are; *Une Nuit Orageuse*, first played at the Vaudeville, Paris, Sept. 18, 1852; *Ne Touchez pas à la Hache*, *Folies-Dramatiques*, April 15, 1854; *O! le Meilleur des Pères*, *Variétés*, June 23, 1854; *Philanthropie et Repentir*, *Variétés*, April 25, 1855; *Trop Beau pour Rien Faire*, *Bouffes*, Feb. 9, 1856; *Une Femme qui n'y est pas*, May 3, 1856; *Une Bonne pour Tout Faire*, *Déjazet*, March 16, 1860; *La Bouquetière de Trianon*, Théâtre St. Germain, Nov. 24, 1864; *La Folie Fille de Perth*, Théâtre Lyrique, Dec. 26, 1867; *L'Officier de Fortune*, Ambigu, Sept. 11, 1874; and *La Fée des Bruyères*, Alcazar, Brussels, Feb. 27, 1878. He was also author of several novels.

Adye, Sir John Miller, a British soldier, born in 1819; died in Rothbury, Northumberland, Aug. 26, 1900. His father and grandfather were officers of artillery, and he was sent to Woolwich at an early age, and entered the corps of royal artillery in 1836. In 1843 he was appointed adjutant at Dublin. In 1848, when in command of the artillery detachment at the Tower, he prepared for a Chartist uprising in London. He was brigade major in the Crimean War, and when Gen. Cator's health failed it fell to him to discuss artillery maneuvers with Lord Raglan. He was promoted major, and took part in the battles of Alma, Balaklava, and Inkerman, and in the siege of Sebastopol. On the outbreak of the Indian mutiny in 1857 he went out as assistant adjutant general, saw plenty of fighting, and when it was over he remained nine years, commanded the artillery in Bombay, was in active service on the Afghan frontier and in the Bhutan campaign, and in the intervals of warfare enjoyed the sports of India. He was appointed director of artillery at the War Office four years after his return to England, was associated with the changes in administration and the conditions of service made by Lord Cardwell, received the order of knighthood in 1873, and in 1875 was made governor of the Woolwich Academy. In 1880 Mr. Gladstone appointed him surveyor general of ordnance. In 1882 he left the War Office to serve as chief of staff in Sir Garnet Wolseley's Egyptian expedition, the success of which was partly due to his assistance. After filling the post of Governor of Gibraltar for four years, he retired from active service. He published accounts of some of the campaigns in which he had a part, also a volume on Indian frontier policy, and in the leisure of his later years he produced a book of *Recollections of a Military Life*.

Ahmed ben Musa, Grand Vizier of Morocco, died May 13, 1900. His father was a Grand Vizier, and he himself in the reign of Mulai el Hassan held the post of Lord Chamberlain while Sid el Haj Amaati was Vizier. He had freer access to the Sultan at all times than the Vizier. When the Sultan died while on an expedition against revolted tribes, he and a few slaves knew of the death, and he brought the corpse back to the coast in a closed palanquin, issuing orders to the

army in the Sultan's name as though he were still alive and sending messengers ahead with sealed letters containing directions in accordance with which Mulai Abdul Aziz (a boy of fourteen) was proclaimed Sultan at Rabat. The Grand Vizier and his brother, the Minister of War, and the high court officials who were their creatures were cast into dungeons before the new Sultan reached Fez, and their property was confiscated. Sid Ahmed had himself proclaimed Grand Vizier, filled the chief offices with members of his own family, and till the day of his death was the ruler of Morocco, a masterful and cruel ruler, who kept the wild tribes in order with an iron hand. The Rahamnas were exterminated, an army was quartered on the semi-independent tribes of Sus, and the peaceful agricultural tribes suffered nearly as much from the ceaseless extortions of the Grand Vizier, who diverted to his own coffers the moneys collected for the imperial treasury, and bought house property and built himself palaces almost as grand as the Sultan's own in every city of Morocco. Gifts of money were the price of every favor or consideration at his hands, and whoever ceased to bring gold lost his position and influence if not his life as well.

Ahmed Djeval Pasha, a Turkish statesman, born in 1848; died in August, 1900. He entered the cadet school at Kuleli at the age of ten, passed into the military academy at Pancaldi in 1864, and on his graduation in 1869 was appointed adjutant to the Sultan Abdul Aziz. He acquired a reputation as a military writer by publishing a history of the Turkish military system. In the Russo-Turkish War of 1877 he had charge of the fortification of Shumla, and on receiving promotion to lieutenant colonel was made chief of staff at that station. He was a member of the Frontier Delimitation Commission after the peace, was advanced to the grade of brigadier general in 1884, and was appointed Turkish plenipotentiary to Montenegro, where he remained over four years and contributed a great deal to the improvement of relations with the principality. He was recalled to take the post of a military inspector. When the Cretan insurrection began he was appointed chief of staff to the troops dispatched to the island, and was made Provisional Governor of Crete. He succeeded in re-establishing order, and was made Mushir in 1890. From this post he was called by the Sultan in September, 1891, to the office of Grand Vizier. His vizierate lasted till June, 1895. He was regarded as a man of progress, and an admirable diplomatist. He failed, however, to prevent the interference of the powers in the Armenian question, and when they had presented their demands for radical reforms he was unable to induce the Sultan to yield. The murder of the English and Russian consuls by Bedouins near Jeddah in Arabia made a change of viziers necessary, and he gave up his post to Said Pasha. When, in 1897, the last Cretan insurrection broke out he was again appointed to command the Turkish troops in Crete, but was restrained from putting down the rebellion by the intervening powers. Later he commanded a corps in Damascus.

Albert, John, a German violinist, born in Kiel, June 24, 1809; died in Philadelphia, Pa., Jan. 2, 1900. He was in his early years a violinist and organist of high repute among European concert performers. His fondness for mechanics led him eventually to become a maker of violins, and gave him the name of the American Stradivarius. He came to the United States at the time of the civil war, and discovered by accident that certain American woods are the best in the world for

violins. He settled in Philadelphia, where he remained until his death. His instruments are much prized.

Althaus, Julius, an English neurologist, born in Detmold, Germany, in 1833; died in London, England, June 11, 1900. He was the son of a clergyman of the Reformed Church, was sent to the University of Bonn, and subsequently studied medicine at Göttingen, Heidelberg, and Berlin. He settled in London, adopting the treatment of nervous diseases as his specialty, and becoming in 1860 a member of the Royal College of Physicians. In 1866 he founded the Regent's Park Hospital for Epilepsy and Paralysis. He was the acknowledged authority in England on the use of electricity in medical treatment, and his fame as a neurologist was world-wide. He wrote extensively on professional subjects, many of his books being translated into French, German, and Italian. A partial list of his writings includes *The Spas of Europe* (London, 1872); *The Value of Galvanism in the Treatment of Paralysis, Neuralgia, and other Affections* (3d ed., 1864); *Epilepsy, Hysteria, and Ataxy* (1866); *Electrolytic Treatment of Tumors and other Surgical Diseases* (1867); *Galvanism and Electro-magnetism in Medical Surgery* (1868); *Treatise on Medical Electricity* (1869); *Diseases of the Nervous System* (1877); *Infantile Paralysis and some Allied Diseases of the Spinal Cord* (1878); *The Functions of the Brain* (1880); *Sclerosis of the Spinal Cord* (1884); *Tinnitus Aurium: Its Treatment by Electricity* (1887); *Failure of Brain Power* (5th ed., 1898); *The Value of Electrical Treatment* (1895); *Influenza*.

Anderson, John, a Scottish scientist, born in Edinburgh, Oct. 4, 1833; died in Buxton, England, in August, 1900. He was educated at Edinburgh University, taking the degree of M. D. in 1861, and winning a gold medal for his thesis *Observations in Zoölogy*. He was Professor of Natural Science at the Free Church College, 1863-'64, and Professor of Comparative Anatomy in the Medical College, Calcutta, 1864-'86. He twice accompanied expeditions to western China in the capacity of scientific officer, and in 1881 was sent to investigate the marine zoölogy of the Mergui Archipelago. He retired from the Government service in India in 1887. His published works embrace *A Report on the Expedition to Western China via Bhamo* (1871); *Mandalay to Momien; Anatomical and Zoölogical Researches* (1878); *Catalogue of the Mammalia in the Indian Museum* (1879); *Handbook to the Archæological Collection of the Indian Museum* (1881-'82); *Fauna of Mergui and its Archipelago* (1889); *English Intercourse with Siam in the Seventeenth Century* (1890); *Herpetology of Arabia* (1890); and *Zoölogy of Egypt, Part First, Reptilia and Batrachia* (1898).

Argyll, George Douglas Campbell, Duke of, born April 30, 1823; died at Inverary Castle, April 24, 1900. His father, the seventh duke, who succeeded his elder brother, took his seat in the House of Lords as a Moderate Conservative supporter of Sir Robert Peel, breaking with the tradition of the Campbells, for MacCallum More, the chief of the clan, had till then been party chief of the Scottish Whigs also. Without the training of the public school or a university education, but well read and with many intellectual accomplishments and a strong bent for dialectics, he came out in support of the Church of Scotland in its contest with the civil power by printing a pamphlet entitled *A Letter to the Peers by a Peer's Son*, in 1842, followed by others in which he developed a vigorous controversial style, and

evinced thus early his proud independence of character by taking a ground opposed to the opinions of his family. The very title of the first pamphlet revealed as the author Lord Lorne, the heir of the Campbells. His moral independence led him to become a communicant for a season of the Episcopalian Church, because he disapproved of disruption, and would not follow his friends into the Free Kirk that they founded. A Presbyterian he was, however, by nature as much as by birth and environment, and he returned to the Kirk of Scotland and drew a fulmination of the Bishop of Glasgow upon his head by his arraignment of the Scotch Episcopalians of the Stuart period in a book called *Presbytery Examined*. He succeeded to the titles and estates of the main branch of the Campbells on the death of his father, in 1848. On taking his seat in the House of Lords he gave an independent support to Lord John Russell, and gradually renewed the connection of his family with the Whigs. His first speech was in support of the bill removing Jewish disabilities. He spoke frequently on Scotch subjects, and on ecclesiastical questions he engaged in spirited arguments with Bishop Wilberforce. When Peelites and Whigs formed a coalition ministry in 1852 the Duke of Argyll, connected as he was with both parties, was admitted at once into the Cabinet as Lord Privy Seal. When the Aberdeen ministry was disrupted on the question of war with Russia, and resigned on Feb. 8, 1855, the Duke of Argyll gave his support to Lord Palmerston, and adhered to him after the desertion of the Peelites, led by Mr. Gladstone, sharing the latter's sympathies for the Christians of Turkey, but convinced that Russia threatened Great Britain's power and prestige in the East. In the Palmerston Cabinet he exchanged his office for that of Postmaster-General at the end of 1855. In those stirring times of war and international politics he had no opportunity to show his administrative ability. Lord Palmerston gave way to Lord Derby on Feb. 22, 1858, and came in again on June 17, 1859. In his second Cabinet the Duke of Argyll resumed the office of Lord Privy Seal, which he held until the fall of Lord John Russell's Cabinet on the reform question in 1866. He was the most fearless and aggressive debater in the upper house, not hesitating to measure swords with Lord Derby. He delighted in public controversy at all times, and had a vast fund of knowledge on the most various subjects, from which he forged arguments wherewith to meet the champions in every field; Bishop Wilberforce, Lord Derby, Mr. Gladstone, Mr. Disraeli, Prof. Huxley, Herbert Spencer—all these and many others he challenged on their own ground, his armory that of a keen and polished controversialist, his spirit that of a Highland chieftain. His earnest and independent convictions he would never suppress for reasons of expediency or allow to be clogged with social or party trammels. He had been long before the civil war broke out in the United States on terms of friendship with Emerson, Charles Sumner, Harriet Beecher Stowe, and other opponents of slavery, and when the South seceded he stood almost alone among the British aristocracy and quite alone in the Cabinet in his outspoken and consistent sympathy and support of the Unionist cause. He was the only other member of the Cabinet who approved the Foreign Secretary's demand that the Alabama should be held if she re-entered a British port. His logical mind acquiesced in the justice of the Geneva award, against which all England murmured. His opinions on the American question made him popular with the advanced Liberals;

not so his views regarding Indian policy, which he expounded in 1865 in a book on India under Dalhousie and Canning, defending Lord Dalhousie's annexations, to which as a member of the Cabinet he had assented. His imperialistic convictions won for him the post of Secretary of State for India in the Cabinet constituted by Mr. Gladstone on Dec. 9, 1868, which lasted till Feb. 21, 1874. When in opposition again he took sides with the Conservatives and against Mr. Gladstone on the Scotch patronage bill, but in 1876 he vigorously attacked Mr. Disraeli's Eastern policy, and took up the cry of Bulgarian atrocities as soon as it was raised by Mr. Gladstone. From the beginning of the Afghan complications in 1878 he assailed the Government not only in Parliament, but in the press, and his polemics contributed to the defeat of the Conservatives after the dissolution of Parliament. He became Lord Privy Seal in Mr. Gladstone's second Cabinet, constituted on April 28, 1880. His resolute attitude on the Irish land question had considerable effect on the subsequent history of English parties. He accepted the compensation for disturbance bill as a temporary charitable measure, but objected to vesting in a special tribunal the power to fix rents, and when the land bill was adopted by the Cabinet in the spring of 1881 he resigned, and became the most severe and ingenious critic of the Irish policy of the leader with whom he had been connected by the closest political ties for thirty years. In 1884 he gave a qualified support to the Gladstone Government on the question of Parliamentary reform, and he approved the negotiations with Russia. When Irish home rule was espoused by Mr. Gladstone in 1886 the Duke of Argyll was one of the most active and formidable antagonists of the Liberal policy, although he kept his seat as an independent on the cross benches in the House of Lords. When the Unionists defeated home rule in the general election he supported the general policy of Lord Salisbury's Government, and gave a hearty approval to Mr. Balfour's Irish administration. In 1887 he moved a vote of confidence in the Irish policy of the Government, and as none of the Liberal peers cared to answer the irresponsible utterances of their former associate it was passed without a dissenting voice. The cleft between him and Mr. Gladstone widened after the latter's return to office in 1892. He denounced the home rule bill of 1893 as unsparingly as he had that of 1886. His hostility toward the Irish agrarians grew intensely bitter when Mr. Davitt and his Scotch disciples attempted to apply the principles of Irish land legislation in Scotland for the benefit of the crofters on the islands and in the Highlands and thus affect his own great estates. In the beginning of 1895 when he was assailing Lord Rosebery's plan of mending or ending the House of Lords on a public platform he was seized with symptoms of heart failure, which warned him to desist from the strenuous excitement of political controversy. His last prominent act in public life was to move the rejection of the deceased wife's sister bill in 1896. The Duke of Argyll sat as an English peer with the unfamiliar title of Baron Sundridge until he was created a peer of the United Kingdom in 1892. His long and conspicuous political career was only half of his claim to distinction. His broad and many-sided mind and his trenchant and vigorous style earned for him a hearing in theological controversies, in metaphysical speculations, in physical science, in economical theories, in historical research, and in literary criticism. Besides innumerable and incessant contributions to the reviews and to the

Times and other newspapers, some of the books that he published are *The Reign of Law* (1866); *Primeval Man* (1869); *The Unity of Nature* (1884); *Scotland as it was and as it is*; *Unseen Foundations of Society*; *The Eastern Question* (1879); *History and Antiquities of Iona*; and *The Burdens of Belief* (1894).

Armstrong, William George, Baron, an English scientist, born Nov. 26, 1810; died at Rothbury, Northumberland, England, Dec. 27, 1900. He was educated at a school in Bishop Auckland, and adopting the profession of the law, practiced as a solicitor in Newcastle from 1832 to 1847. He then became an engineer and founded the since famous Elswick Works, near Newcastle. From 1859 to 1863 he was engineer of rifled ordnance at Woolwich. He was the first to put into practice the principles now almost universally governing the manufacture of heavy ordnance. Among his inventions are the Armstrong gun, the hydraulic crane, and the accumulator, which substituted an artificial head for that gained by mere altitude. He was president of the British Association in 1863. He received the degree of LL.D. from Cambridge in 1862 and D.C.L. from Oxford in 1870, as well as many foreign degrees. He published *A Visit to Egypt* (1875); *Electric Movement in Air and Water* (1897); and many professional pamphlets. He was an enthusiastic lover of art, and his picture gallery at Craigside contained many celebrated paintings.

Arnold, Thomas, an English author, born at Laleham in 1823; died in Dublin, Nov. 12, 1900. He was a son of Dr. Arnold of Rugby, younger by a year than his brother Matthew. He went to school at Winchester for a year, then entered Rugby, obtained a scholarship at University College, Oxford, in 1842, took his degree in the first class in 1845, was a clerk in the Colonial Office for a few months, and then, tired of Europe, he sought a life free from false aims and shackling conventionalities in the distant colony, whither other Oxford idealists had gone before him. After a while he went to Tasmania as inspector of schools, married there the governor's granddaughter, entered the Roman Catholic Church in 1856 as the result of the Oxford movement, which was at the crisis when he was an undergraduate, and returned to England to take a professorship in the Catholic college founded by Newman, whom he afterward followed to the Oratory School in Birmingham, where his *Manual of English Literature* was prepared. Then he conformed again to the Church of England and returned to Oxford, taught English literature and history there, edited Wycliff, translated Beowulf, and prepared other works of archaic literature for the press. In 1877 he became a Catholic once more, and on being appointed a fellow of the newly established University of Ireland he went to Dublin to spend the remainder of his life in teaching, examining, and writing. Mrs. Humphry Ward, the novelist, is the eldest of his numerous children.

Atkinson, John Christopher, an English clergyman, born at Goldhanger, Essex, England, in 1814; died at Danby-in-Cleveland, Yorkshire, March 31, 1900. He was educated at Cambridge, and was ordained in 1841. In 1847 he became vicar of Danby, Yorkshire, and held that living until his death. He is best known to the general public by his admirable *Forty Years in a Moorland Parish* (1891), which has often been compared to White's *Natural History of Selborne*. His knowledge of birds and flowers was extraordinary. Despite his manifold interests outside of his profession, he was a devoted clergyman, and the claims of his remote and rugged parish were

always first with him. Besides the book already named, he published *Walks, Talks, Travels, and Exploits of Two Schoolboys* (1859); *Play Hours and Half Holidays* (1860); *Sketches in Natural History* (1861); *British Birds' Eggs and Nests* (1861); *Stanton Grange, or Life at a Private Tutor's* (1863); *A Glossary of the Cleveland Dialect, the work of nearly twenty years* (1868); *Lost, or What Came of a Slip from Honor Bright* (1869); *The History of Cleveland, Ancient and Modern* (1872); *Additions to a Glossary of the Cleveland Dialect* (1876); *A Handbook for Ancient Whitby and its Abbey* (1882); *Memorials of Old Whitby* (1896); *The Last of the Giant Killers*; and *Scenes in Fairy Land*.

Bara, Jules, a Belgian statesman, born in Tournay in 1835; died in Brussels, June 26, 1900. He was a physician's son, and on completing his studies at the Brussels University at the age of twenty-two, receiving a doctor's degree in political science as well as in laws, he began a career in politics and at the bar simultaneously, coming forward as a Liberal of extreme anticlerical views, a frank agnostic. His eloquence and business ability won for him a seat in the Chamber from Tournay in 1862, and at the age of thirty he was called into the Cabinet as Minister of Justice. During the five years that the ministry of Frère-Orban lasted he carried through a reform of the criminal code. He defended the rights of the state against all the ingenious claims of the Church, and when in the Opposition after 1870 his gifts of humor and sarcasm, his knowledge of law and politics, and the alert and indefatigable attention that he gave to parliamentary business gave him a sure claim to the Ministry of Justice in Frère-Orban's second Cabinet, in which it fell mainly to him to uphold in theory and practice, in the Chamber and in the schoolrooms, the principle of nonconfessional state education and the exclusion of the clergy from the direction of studies or from admission to the schools except in the hours allowed for religious instruction. The Premier received valuable assistance from him in the diplomatic and religious difficulties created by the severance of relations with the Vatican. When the Clericals finally upset the nonreligious public-school system in 1884, Bara continued the struggle as one of the leaders of the Liberal Opposition. In 1893 he opposed the electoral reform adopted by the Clerical majority on the basis of universal suffrage, and thereby he sacrificed his seat for Tournay, being defeated in the election of 1894. The provincial council then sent him to the Senate, in which body, as the oldest and ablest member of the Opposition, his utterances still had weight and influence.

Barry, Charles, an English architect, born Sept. 21, 1823; died in Worthing, Sussex, June 2, 1900. He studied architecture under his father, whom he assisted when the latter was building the Houses of Parliament, and at the age of twenty-six began practice on his own account. In 1858 he was appointed architect to Dulwich College, the new buildings of which were designed by him. Among other works of his are Bylaugh Hall, Norfolk; Stevenstone, North Devon; the Dulwich Public Library; New Burlington House, Piccadilly; the rebuilding of Clumber House; and the Civil Engineers' Institute, Westminster. He was a fellow of the Royal Institute of British Architects from 1864, and its president in 1876-79.

Beale, Anne, an English novelist, died April 2, 1900. She was the author of popular evangelical tales for girls, and of a good many novels also. Her published works comprise *Poems*; *Vale*

of the Towey, or Sketches of South Wales; The Baronet's Family; Simplicity and Fascination (1855); Nothing Venture, Nothing Have (1864); Country Courtships (1869); Fay Arlington (1875); The Pennant Family (1876); The Miller's Daughter (1877); Rose Mervyn of Whitelake (1879); Gladys, the Reaper (1881); Idonea (1881); The Queen o' the May (1882); The Young Refugee (1882); Squire Lisle's Bequest (1883); Fisher Village (1885); Seven Years for Rachel (1886); Courtleroy (1887); Restitution (1888); and Charlie is my Darling (1897).

Beatty-Kingston, William, an English journalist, born in 1837; died at sea, Oct. 4, 1900. He obtained an appointment in the Public Record Office in 1852, and four years later entered the Austrian consular service as vice-chancellor of the consulate general in London, but was transferred in 1857 to Cardiff. He remained at Cardiff until 1865, when he became a special correspondent of the London Daily Telegraph, and in this capacity he lived in various Continental cities, and was present in the Austro-Prussian, Franco-Prussian, and Russo-Turkish campaigns. From 1879 he was on the editorial staff of the Daily Telegraph. His published books are *The Battle of Berlin* (1871); *William I, German Emperor and King of Prussia* (1883); *Our Chancellor*, translated from the German of Moritz Busch (1884); *Music and Manners: Personal Reminiscences and Sketches of Character* (1887); *Monarchs I Have Met* (1887); *A Wanderer's Notes* (1888); *The Chumplebunnys*, and *Some Other Oddities* (1889); *A Journalist's Jottings* (1890); *Men, Cities, and Events* (1895).

Benedetti, Count Vincent, a French diplomatist, born in Bustia, Corsica, April 27, 1817; died in Paris, March 28, 1900. His father was the local magistrate, and he went to Paris to study law. After taking his degree he began his career in 1840 as a clerk in the consulate at Alexandria, where he performed his duties so well that in 1845 he was appointed consul in Cairo. In 1848 he became consul general at Palermo, and in 1852 his early chief and patron, on being appointed ambassador at Constantinople, called him thither as secretary of legation. He declined the legation to Persia in 1855, and returned to Paris to take the office of director of political relations in the Ministry of Foreign Affairs, serving in 1856 as secretary of the Congress of Paris. From 1857 till 1862 he was minister to Turin, whence he was recalled on account of the active sympathy that he showed for the cause of Italian unification. In 1864 he was sent as ambassador to Berlin. He endeavored without success to hinder the aggrandizement of Prussia as the result of the Prusso-Austrian War of 1866, and was even cajoled into proposing the annexation of Belgium to France as compensation, furnishing Count Bismarck with a document that proved very damaging to Napoleon when made public at the beginning of the Franco-Prussian War. Benedetti asserted in a pamphlet published after his retirement that the Belgian proposal was Bismarck's, and that he had written it out from Bismarck's dictation. The question of French compensation for the aggrandizement of Prussia was the subject of negotiations in Berlin and Paris from the time of the Austrian campaign. Benedetti was in a difficult position after he had presented Napoleon's proposal to obtain compensation in German territory. The negotiations were spun out by Bismarck while Prussia was perfecting her armaments. All that Benedetti could obtain was the neutralization of Luxembourg, with the suggestion that France seek compensation elsewhere than in German territory. When affairs between

France and Prussia approached a crisis he did little to avert war. He was unable to fathom the designs of Bismarck or influence the decisions of Napoleon and his ministers. When he demanded from King Wilhelm a pledge that the Hohenzollern candidature for the Spanish throne should not be renewed he foresaw discomfiture as clearly as when he proposed French expansion on the Rhine. He carried out the orders of his Government, and he was not gruffly rebuffed by the King, as has been reported. He was a diplomatist of fine Italian tact and delicacy of feeling, not hostile to German unity, but seeking the advantage of his own country, shrewd and capable in affairs, though unable to match the cunning of Bismarck, knowing that the King preferred peace, yet scenting war in the atmosphere of Paris as well as Berlin. His personal agreeableness and cleverness enabled him to stave off the rupture on occasions when a less experienced and less subtle ambassador would have been entrapped into the indiscretion that Bismarck and Moltke desired, so that they finally had to resort to the device of altering the King's dispatch, making it read as a decisive announcement when it was intended to leave negotiations still open. Benedetti was retired when he returned to Paris, and since then he has lived quietly there, in Ajaccio, or in Italy. Napoleon gave him the grand cross of the Legion of Honor in 1866, and in 1869 made him a count.

Bertrand, Joseph, a French mathematician, born in Paris, March 11, 1822; died there, April 3, 1900. He was an infant prodigy who passed the entrance examination of the École Polytechnique at the age of eleven, and when he entered at seventeen he astonished his teachers by the power and maturity of his reasoning faculties. He served in the mining bureau after leaving college until he was appointed a professor in the St. Louis Lyceum, and after that he was successively examiner and then professor in the Polytechnique, professor in the École Normale, and professor in the Collège de France. He was elected a member of the Academy of Sciences in 1856, and in 1874 he succeeded Élie de Beaumont as perpetual secretary. In 1884 he succeeded the chemist Dumas in the French Academy. Of his treatise on the differential and integral calculus the third part never appeared, the manuscript having been burned in the fires of the Commune. His lectures on the calculus of probabilities, on thermodynamics, and on electricity have been published, and innumerable original papers on mechanics and geometry printed in mathematical journals or the reports of the Academy of Sciences. His principal contributions to literature are studies of D'Alembert, Lavoisier, Auguste Comte, and Pascal.

Betz, Franz, a German singer, born in Mainz, March 19, 1835; died in Berlin, Aug. 12, 1900. He was educated at the Polytechnic, in Carlsruhe. His *début* was made at Hanover, in 1856, and he remained in the operatic company of that city until 1859, when he was engaged for the Royal Opera in Berlin, where he remained during his life. His Berlin *début* was in the rôle of Don Carlos in Ernani, a part in which he was always very popular. He was the original Hans Sachs in Wagner's *Meistersinger* in Munich, June 21, 1868, and Wotan at the Bayreuth festival of 1876. In 1862 he visited England and sang at the Crystal Palace, May 6 and 27. All these occasions were during his vacations from the Berlin Opera.

Binns, Richard William, an English porcelain manufacturer, born in Dublin, Ireland, in 1819; died in Worcester, England, Dec. 28, 1900. He

became a partner in the Royal Porcelain Works, at Worcester, in 1851, and under his management a much improved grade of porcelain was manufactured and the fame of the Worcester china greatly extended. He published *A Century of Potting in the City of Worcester: A History of the Royal Porcelain Works* (2d ed., 1877); and *Worcester China: A Record of the Work of Forty-five Years, 1852-1897* (1897).

Blackmore, Richard Doddridge, an English novelist, born in Longworth, Berkshire, June 9, 1825; died near London, Jan. 20, 1900. On the maternal side he was descended from Philip Doddridge, the well-known divine of the eighteenth century. He was educated at Blundell School, at Tiverton, familiar to all readers of Lorna Doone, and at Exeter College, Oxford. He was called to the bar of the Middle Temple in 1852, and for some time practiced as a conveyancer. He subsequently engaged in the business of market gardening at Teddington, a few miles out of London, near Hampton Court, and had several acres under cultivation. His earliest literary efforts were in verse, and attracted no particular attention. He then turned to fiction, but had published two novels before the issue of *Lorna Doone* (1869) made him quickly famous. Blackmore's disposition was extremely retiring, and he allowed no details of his private life to appear in print. His published books comprise *Poems by Melanter* (London, 1854); *Epullia, and Other Poems* (1855); *The Bugle of the Black Sea* (1855); *The Fate of Franklin* (1860); *The Farm and Fruit of All: a translation in verse of the First and Second Georgics of Virgil, by a Market Gardener* (1862); *Clara Vaughan: A Novel* (1864); *Craddock Nowell: A Tale of the New Forest* (1866); *Lorna Doone: A Romance of Exmoor* (1869); *The Georgics of Virgil, a translation* (1871); *The Maid of Sker* (1872); *Alice Lorraine: A Tale of the South Downs* (1875); *Cripps the Carrier: A Woodland Tale* (1876); *Erema, or My Father's Sin* (1877); *Mary Anerley: A Yorkshire Tale* (1880); *Christowell: A Dartmoor Tale* (1882); *The Remarkable History of Sir Thomas Upmore* (1884); *Springhaven: A Tale of the Great War* (1887); *Kit and Kitty* (1889); *Perlycross* (1894); *Fringilla, or Tales in Verse* (1895); *Tales from the Telling House* (1896); and *Daniel* (1897). The fame of *Lorna Doone* has in a measure overshadowed his other romances, but such books as *The Maid of Sker* and *Cripps the Carrier* do not fall far behind his masterpiece, while none of his stories can be styled unworthy of his literary reputation. In all appears a rich vein of humor, full of quaint turns and individuality, but never exaggerated, while pathos, appearing more rarely, is at no time overstrained. Blackmore's strength can not be said to lie in his plots, which are usually very much involved, the progress toward the event being hesitating and uneven. The complication of the plot is explained with perfect clearness, it is true, yet the solution of the mystery is apt to be a little confusing. It must be admitted, too, that several of his narratives suffer from a plethora of incident, and that the canvas displays too many characters. But the impetuosity of his narrative carries the reader along so swiftly that minor defects affect his enjoyment slightly, if at all. Although excelling in rapid, animated narration, he was equally successful with descriptive passages of a quiet, peaceful nature, as any one familiar with his books needs not to be told. His imagination was fertile, and his insight into character and motive very keen. His stories possess an abiding charm, and *Lorna Doone* and *The Maid of Sker* seem destined to endure.

Brohan, Emilie Madeleine (Mme. Pio Uchard), a French actress, born in Paris, Oct. 22, 1833; died there, Feb. 25, 1900. She was a sister of Josephine Brohan and a daughter of Suzanne Brohan, famous actresses of the French theater. She entered the Conservatoire in 1848, and was graduated with the first prize for comedy, July 25, 1850. Her first appearance was made at the Théâtre Français, Oct. 13, 1850, as Marguerite in *Les Contes de la Reine de Navarre*, a drama written by Scribe and Legouvé. Her success was instantaneous. She married Mario Uchard, 1854, but their union was not happy, and after a few months she withdrew from the Théâtre Français and went to Russia. Uchard wrote a play called *La Fiammina*, supposed to present a picture of their unfortunate domestic relations, and it was produced with some success at the Français in 1857. In the same year Madeleine returned to Paris, and was re-engaged with the Comédie Française, with which she remained as an employee and *sociétaire* till her retirement in 1885. During this long career she retained her great popularity with the public of Paris and played all the rôles in comedy that belong to the famous repertory of France's national theater. Her most notable creations, in addition to her first part, were *Marianne in Les Caprices de Marianne* of Alfred de Musset; the title rôle of *Mademoiselle de la Seiglière*, by Jules Sandeau; *Mme. de Briac in Une Journée d'Agrippa d'Aubigné*, by Édouard Fouassier; the leading part in *Par Droit de Conquête*, by Ernest Legouvé; that of *Les Deux Veuves*, by Félicien Mallefille; *Hélène de Lesneveu in Les Doigts de Fée* of Scribe; *Jeanne Dalibon in Rêves d'Amour*, by Scribe; and *Biéville*, the leading rôle in *Loge d'Opéra*, by Jules Lecointe; and those of *Une Amie* and *Le Lion Amoureux*, by Ponsard. One of her finest performances was the part of *Elmire in Tartufe*.

Burton, Sir Frederic William, an Irish artist, born near Limerick, in 1816; died in London, March 16, 1900. He was educated in Dublin, and studied drawing under the brothers Brocas, making such rapid progress that the Dublin Society exhibited works by him in 1834, and elected him an associate in 1837 and a full member in 1839. In 1842 he exhibited at the London Academy *The Arran Fisherman's Drowned Child* and *A Connaught Toilet*. In 1851 he went to Munich, and his later work showed in consequence the influence of German methods. In 1855 he became an associate of the Royal Society of Painters in Water Colors, and in 1856 a full member, his headquarters being in London henceforth. From 1874 to 1894 he was director of the National Gallery, and was chiefly responsible for the large and important additions within that time. From 1863 Burton was a fellow of the Society of Antiquaries, and in 1884 was knighted. Owing to a malformation of his right hand, Burton painted with his left.

Bute, John Patrick Crichton-Stuart, Marquis of, a British nobleman, born Sept. 12, 1847; died in Old Cumnock, Ayrshire, Oct. 9, 1900. He succeeded his father, who was the second Marquis of Bute, but of ancient and royal ancestry, in the first year of his life, and was brought up as an Anglican by his mother, though his father had been royal commissioner to the Church of Scotland, and was sent to Harrow and to Christ Church, Oxford, after a contest in the courts between his English and Scottish guardians. Before he could take his degree, however, he was received into the Roman Catholic Church by Monsignor Capel. He was a scholar of retiring temperament, author of several books on ecclesiastical and antiquarian subjects, an authority on Byzantine art

and history, but above all an efficient man of business, who devoted himself to the development of his mining property in Wales and invested over a million sterling in the canal, docks, and harbor at Cardiff. This town, built up by his enterprise, made him its mayor in 1890. He planted the largest and the only successful vineyard in Great Britain. He was a generous supporter of education and learning and a benefactor to Anglicans and Presbyterians as well as to Catholics.

Butterfield, William, an English architect, born in 1814; died in London, Feb. 23, 1900. He was one of the masters of the Gothic revival in England started by Pugin, who was two years his senior. His work was more original, though not always as successful, as that of Pugin, and bolder and more original than that of Clement Scott. He designed the buildings of St. Augustine's College, in Canterbury, and thereby won the favor of the Tractarians of Oxford. The chapel of Balliol College and the buildings of Keble College; the churches of All Saints and St. Augustine, in London; the chapel and other buildings at Fulham palace; St. Mary Magdalene, in Enfield; St. Augustine, at Bournemouth; the chapel and school buildings at Rugby; and the grammar school at Exeter, are his principal works. He also restored many ancient buildings, and in doing so destroyed some excellent examples of the architecture of the Renaissance to produce uniformity of style.

Canossa, Luigi di, an Italian prelate, born in 1809; died in Verona, March 12, 1900. He was Bishop of Verona, and was created a cardinal in 1877.

Cave, Alfred, an English clergyman, born in London, Aug. 29, 1847; died at Hampstead, Dec. 19, 1900. He was educated at New College, London, prepared himself for the Congregational ministry, and held pastorates at Berkhamstead, 1872-'76, and Watford, 1876-'80. He resigned the second charge to become Professor of Hebrew and Church History at Hackney College, of which he was made principal in 1882. He held an honored place among biblical scholars, and ranked as an extremely conservative theologian. His writings include *The Scriptural Doctrine of Sacrifice and Atonement* (1877); *The Inspiration of the Old Testament Inductively Considered* (1888); *Introduction to Theology* (1888); *The Battle of the Standpoints: The Old Testament and the Higher Criticism* (1890); *The Spiritual Word the Last of Philosophy and the First of Christ* (1894).

Christian Victor, Prince, of Schleswig-Holstein, born in Windsor Castle, April 14, 1867; died in South Africa, Oct. 29, 1900. He was the eldest child of the Prince of Schleswig-Holstein and Princess Helena, fourth child of Queen Victoria of England. He was educated at Wellington College and at Magdalen College, Oxford, then entered the military academy at Sandhurst, and in 1888 joined the army as second lieutenant in the King's Rifles, became a lieutenant in 1890, and in 1896 a captain with the brevet rank of major after having served in India as orderly officer to Major-Gen. Elles in the Hazara expedition and in the Miranzai expedition in 1891, in the Isazai expedition in 1892, and as aid-de-camp to Major-Gen. Sir Francis Scott in West Africa when the expedition was sent to Ashanti against King Prempeh in 1895. He served in Gen. Kitchener's Sudan expedition in 1898 as staff officer to the troops on board the gunboat flotilla, and in October, 1899, went out to South Africa to serve on the staff of Gen. Roberts. He was with a column that lost its guns and a third of its men in a Boer ambuscade. His death was due to enteric fever.

Cluseret, Gustave Paul, a French soldier, born in Paris, June 13, 1823; died in La Crau, Aug. 22,

1900. He was the son of a colonel, and had a priest for his tutor until he entered the military school of St. Cyr, which he left in 1843. As a lieutenant in 1848 he distinguished himself by leading a detachment of the Garde Mobile against the barricades of the Republicans, and received the ribbon of the Legion of Honor. In 1851 he was suspected of republicanism himself, and with hundreds of other officers was relieved of active duty. In 1854 he was reinstated on application and sent to Algeria. Disappointed because his services there were not recognized, he resigned his commission, tried farming for a while, emigrated to New York and speculated without success, and then joined Garibaldi's legion in Sicily, and was appointed a colonel. He was disabled by a wound received at Capua, returned to New York, and when the civil war began obtained an appointment on Gen. McClellan's staff, with the rank of brigadier general. After the war he conducted a newspaper, then joined the Fenians in Ireland, escaped arrest by fleeing to France, and was expelled from there as a Republican agitator. He returned to France at the beginning of the war of 1870, started a Socialist newspaper in Marseilles, called himself commander of the Army of the South, went to Paris when the government of the Commune was set up, and received the post in it of Minister of War, but in the last month of its existence was accused of treachery and thrown into prison. On the suppression of the Paris Commune he escaped to England, and thence to Switzerland, where he undertook to paint under the teaching of Courbet, having been summoned for trial and condemned to death in Paris. In 1878 he joined the Turkish army, and fought against Russia. After the amnesty of 1881 he returned to France, painted pictures, wrote for newspapers, and published a volume of memoirs, in which he charged his colleagues of the Commune with follies and enormities. In 1888 he was elected a Deputy for the Var, and since 1889 he had sat for Toulon.

Cochery, Louis Adolphe, a French politician, born in Paris, April 26, 1819; died there, Oct. 15, 1900. He was admitted to the bar at the age of twenty, and after the February revolution he was appointed to a post in the Ministry of Justice, which he resigned after a little while in order to devote himself to pleading and to journalism. In the elections of 1869 he was elected by the Democratic Opposition a member of the Corps Législatif for the department of Loiret, and took his seat in the Left Center, voting against war with Prussia. The Government of the Fourth of September placed him as commissary general in charge of the defense of Loiret, and that department, on Feb. 8, 1871, sent him to the National Assembly, where he sat in the Left Center, attaching himself later to the Republican Left. In 1876 he was elected to the Chamber of Deputies from Montargis, and voted against the Broglie ministry. He was re-elected after the dissolution of the Chamber, and when the Dufaure ministry was constituted he became undersecretary in the Department of Finance. On March 1, 1878, he united the posts and telegraphs under one administration, which was transformed into a separate department in 1879, of which he remained the chief until the fall of Ferry's last Cabinet, in 1885. As Minister of Posts and Telegraphs he instituted important reforms in the service. The cheap and rapid means of communication with the postal telegraph card, called the *petit bleu*, was his invention. On Jan. 5, 1888, he passed into the Senate.

Coghlan, Elizabeth Elly May, an English singer, born in Paris, France, in 1864; died in Stamford, Conn., April 8, 1900. She was a sister

of Charles and Rose Coghlan, and was educated at the Conservatory of Music, in Paris, where she attracted the attention of Carl Rosa, who engaged her as the leading contralto of his opera company, which place she occupied for years, singing with great success in England and on the Continent. She came to the United States as a member of Mapleson's Opera Company. In 1889 she married Sydney Battam, secretary of the Leadenhall Bank, London. Her last appearance was at Rochester, N. Y., Feb. 24, 1900, with the Joe Ott Comic Opera Company.

Cowie, Benjamin Morgan, an English clergyman, born June 8, 1816; died in London, May 1, 1900. He was educated at Cambridge, and took orders in 1841. From 1844 to 1861 he was principal of the College of Civil Engineers, at Putney, and he was Hulsean lecturer at Cambridge in 1853 and 1854. In the year last named he was Professor of Geometry at Gresham College. He received the living of St. Lawrence, Jewry, London, and was made a minor canon of St. Paul's in 1858, and from 1872 to 1883 he held the deanery of Manchester. He became dean of Exeter in 1883, and held that office until his death. He was a high churchman, though not an extreme ritualist, and was one of the earliest to introduce choral celebrations and vested processions. He published, besides lesser works, *Scripture Difficulties* (1853-'54); *On Sacrifice* (1856); *The Voice of God* (1870); *Ministerial Work* (1872).

Del Puente, Giuseppe, an Italian singer, born in Naples, in 1845; died in New York city, May 25, 1900. He was educated at the Conservatory of Music, in Naples, under the famous masters Guercia and Scafato. He was an enthusiastic Garibaldian, and served as a soldier in the revolution in Italy. After resuming his studies he made his *début* as a baritone at Jassy, Wallachia, in company with Italo Campanini, the celebrated tenor, in 1871. His success was immediate and substantial, and he was successively engaged in the Teatro San Carlo in Naples, La Scala in Milan, the Apollo in Rome, and the Grand Italian Opera in London. Maurice Strakosch heard him in Rome in 1873 in the rôle of Rigoletto, and engaged him for a three years' visit to America. His first appearance in New York was a triumph, and he remained in possession of the baritone rôles at the Academy of Music and the Metropolitan Opera House for successive seasons until his retirement in 1890, when he took up his residence in Philadelphia, and devoted himself to teaching. His greatest rôles were Rigoletto in the opera of that name and the *toreador* in *Carmen*.

Desbordes, Bognis, a French soldier, born in Paris in 1839; died in Saigon, Indo-China, July 14, 1900. He had earned the reputation of a daring and resourceful officer, and had served in various campaigns, when in 1880 he was ordered to occupy upper Senegal as far as Kita, and to make a survey for a railroad to the Niger. He carried on operations against Samory, defeated his forces on Feb. 26, 1882, reached the Niger and built a fort at Bammaton in 1883, and drove Samory back to the south. In 1884 Col. Desbordes was appointed to the command of the artillery in the Tonquin expedition. He was promoted to be a general in 1886, commanded a brigade in Tonquin and Annam in 1887, and continued to serve in Indo-China, rising to be commander in chief of the forces.

Didon, Henri, a French preacher, born in Touvet, Isère, March 17, 1840; died in Toulouse about the middle of March, 1900. He was trained for the Catholic priesthood in a French seminary, studied in Berlin and Leipsic, joined the Domini-

can order, gained fame as an orator, and occupied in succession the principal pulpits of Paris. His resonant voice, free gesticulation, impassioned style, and bold and vigorous language attracted immense audiences. His addresses in the Church of St. Roch made a profound impression, and his freedom of thought and expression disquieted his superiors, who in 1880 sent him to a monastery in Corsica to do penance for eighteen months. He held liberal views in religion and politics, and preached that the Catholic Church is not opposed to the fullest liberty, and that religion and science are not in conflict. In his later life he directed the college of Albert-le-Grand, at Arcueil. Père Didon was the author of a book on the Germans and of a *Life of Jesus*, written in response to the work of Ernest Renan on the same subject.

Dixon, Richard Watson, an English clergyman, born in London, in 1833; died Jan. 2, 1900. He was the son of a noted Wesleyan minister, and was educated at Oxford, where with Burne-Jones and William Morris he edited the *Oxford and Cambridge Magazine* as an exponent of pre-Raphaelite opinions. After being admitted to orders in 1858 he became curate of the parish of Saint Mary-the-Less in Lambeth, and in 1863 was appointed second master of the high school at Carlisle. He was made honorary canon of Carlisle in 1874, vicar of Hayton the next year, and vicar of Warkworth in 1883. Dixon was never a popular writer, for although he possessed both sincerity and power, he was prolix. He was not wanting in poetic insight, and as a historian he was acute and painstaking, but his choice of words was sometimes infelicitous, and his style suffered from audacity of phrase. His writings include *The Close of the Tenth Century of the Christian Era* (Oxford, 1858); *Christ's Company and Other Poems* (London, 1861); *Historical Odes and Other Poems* (1864); *Essay on the Maintenance of the Church of England* (1875); *The Life of James Dixon* (1874); *History of the Church of England from the Abolition of the Roman Jurisdiction* (1877-'90); *Mano: A Poetical History* (1883); *Odes and Eclogues* (Oxford, 1884); *Lyrical Poems* (1885); *The Story of Eudocia and her Brothers*, a narrative poem (1887); *Songs and Odes* (1896).

Doche, Madame (Lady Marie Charlotte Eugénie de Plunkett), a French actress, born in Brussels, Nov. 4, 1823; died in Paris, July 21, 1900. She was the daughter of an Irish family domiciled in Belgium since the migration of the Irish families with the Stuarts. She made her first appearance at Versailles in October, 1837, as Juliette in *Moiroud et Compagnie*. On Jan. 8, 1838, she made her *début* at the Théâtre Vaudeville, Paris, in the play of Renaudin de Caen. With this theater particularly Mme. Doche's fame is most intimately associated, for it was her wonderful popularity that made this house one of the principal theaters of France. It was here that she originated the part of Stella in *Serment de Collège*. During these early years of her public life she used a *nom de théâtre*, Eugénie Fleury. In March, 1839, she married Pierre Alexandre Joseph Doche, conductor of the orchestra at the Vaudeville. In March, 1845, she left the Vaudeville for the Gymnase, where she first appeared, April 17, as Madeleine in *L'Image*. In December following she returned to the Vaudeville, which she again left in 1848. In February, 1852, she returned once more to the Vaudeville to make an epoch in the history of the French stage, for it was then that she created the rôle of Marguerite Gautier in *La Dame aux Camélias* of Alexandre Dumas, fils, known to the American stage as

Camille. She was also the principal actress in Louise de Nanteuil, La Vie en Rose, Madame Lovelace, and Pénélope Normande. In 1859 she created Rose Bernard at the Ambigu, and afterward she played successively at the Gaieté and the Porte St. Martin. She retired many years ago.

Dornton, Charles (Charles Dornton Duff), an English actor, born in Aberdeen, Scotland, Oct. 24, 1837; died in Edgebaston, England, May 11, 1900. He made his first appearance in King John as a page, in his native town, in 1849. He occupied subordinate places in the stock companies of Aberdeen, Belfast, and Jersey successively. In this last theater he was the original Hardress Cregan in Boucicault's Colleen Bawn. Here he met his first wife, a sister of Tom Robertson and Mrs. W. H. Kendal. He was then at Nottingham, Glasgow, and Bradford. In this last-named theater in 1868 he was associated with Madge Robertson (Mrs. Kendal), Charles Matthews, and E. A. Sothern. His next engagement was at the Prince of Wales's Theater, Liverpool, where he remained as leading man for several years. In 1872 he played the leading parts with Mrs. Scott-Siddons for a tour, and in 1873 held a like place with John S. Clarke. In 1875 he began a long and profitable connection with the play The Two Orphans, in which he played Pierre more than three thousand times. He also made very successful tours with The Silver King and Michael Strogoff. March 21, 1891, he became lessee of the Theater Royal, Birmingham, and retired from work as an actor. He married as his second wife Miss Amy Balfour.

Dowson, Ernest Christopher, an English man of letters, born in Lee, Kent, Aug. 2, 1867; died in Catford, Kent, Feb. 23, 1900. He studied at Oxford, and after several years' residence in London spent much time in Paris and Brittany. His health had been failing for some time, and he returned to England in 1899 only to die. Besides publishing translations from the French he wrote two novels with Arthur Moore, A Comedy of Masks (1893) and Adrian Rome (1899). His reputation rests mainly upon his small volume of Verses, issued in 1896, which contained poems of great beauty. Still other works by him are The Pierrot of the Minute, a dramatic fantasy in one act (1897); and Decorations, a collection of prose and verse (1900).

Eça de Queiroz, Jose Maria, a Portuguese novelist, born in Povoá do Varzim, Portugal, Nov. 25, 1845; died in Neuilly, France, in September, 1900. He was educated at the University of Coimbra, and after being editor of a political journal at Evora, was successively consul at Havana, Newcastle, and Bristol, and at the time of his death was consul general for Portugal at Paris. He was the most eminent Portuguese novelist of his time, and was the principal exponent in his country of the realistic school of fiction. His romances were translated into Spanish, German, French, and English. He possessed great powers of observation and description, and was very severe in his portrayal of the failings of Portuguese society. His works include O Crime de Padre Amaro (The Crime of Father Amaro) (1874); O Mandarin (1880); Scenas da Vida Devota (1880); O Primo Basilio, his greatest work, which appeared in French as Cousin Basile, in German as Eine wie Tausend, and in English as The Dragon's Teeth (1885); A Reliquia (A Relic) (1886); Os Maias, or Episodias da Vida Romantica, a spirited satire upon fashionable Portuguese life. With Ramalho Ortigão he wrote a noteworthy story of adventure entitled The Mystery of Cintra Street. He was a member of the Lisbon Academy of Sciences.

Edwards, Alphonse Milne, a French naturalist, born in Paris in 1835; died there April 27, 1900. He was the son of Henri Milne Edwards, an eminent zoologist, and grandson of Bryan Edwards, a West Indian planter, ex-member of the British Parliament, and historian, who settled in Bruges. Graduating in medicine in 1859, he became professor in the School of Pharmacy in 1865, and in 1876 acted as his father's deputy as Professor of Zoology at the Jardin des Plantes. He was the colleague of Edmond Perrier in deep-sea explorations on the Travailleur and the Talisman. In 1877 he succeeded Gervais in the Academy of Sciences, and in 1885 was elected to the Academy of Medicine. In 1891 he was appointed Professor of Zoology and director of the Jardin des Plantes. He published researches on the fossil birds of France (1866-'72), researches on the extinct birds of Madagascar (1866-'74), an elementary treatise on the natural history of animals (1881-'82), an account of his deep-sea explorations in 1881-'82 and 1888, and the chapters on mammals and birds in Granddier's historical and geographical work on Madagascar.

Elton, Charles Isaac, an English lawyer, born in 1839; died at Chard, Somerset, England, April 23, 1900. His education was obtained at Oxford, and in 1865 he was called to the bar. He rapidly acquired a large practice, and in February, 1884, was returned to Parliament. He failed of reelection the next year, but was returned again in 1886, and sat six years. He published Norway, the Road and the Fell (1864); The Tenures of Kent (1867); Common and Waste Lands (1868); Copyholds and Customary Tenures (1874); Custom and Tenant Right (1882); Origins of English History (1882); The Career of Columbus (1892); The Great Book Collectors (1893).

Faéd, Thomas, a British painter, born in Kirkcudbright in 1826; died in London, Aug. 17, 1900. He was an engineer and the younger brother of John Faéd, whose success as an artist inspired him with a like ambition. He entered the School of Design in Edinburgh and acquired under the tuition of Sir William Allan a thorough training in draughtsmanship and the elementary principles of painting. When he began to paint he at once struck a vein that appealed to the multitude and won for him a wider appreciation and a greater measure of popular and pecuniary success than the greatest of British artists have attained. He chose the field of domestic *genre*, and in this a class of subjects that appeal to the emotions and sympathies—sad scenes of domestic life or anecdotes conveying moral lessons or stirring religious feelings. The Mitherless Bairn, The First Break in the Family, and the rest had no technical qualities to commend them except good drawing and conscientious workmanship, but in exhibitions their homely, pathetic sentiment made them the center of attraction. To artists of the younger schools they served as a warning and an example to deter them from seeking the adventitious aid of pathos and story so obviously and crudely set forth. Faéd went to London in 1852, became an associate of the Royal Academy in 1859, a full member in 1864, and for ten years longer continued to turn out pictures that were readily sold for high prices, even the copyrights of the more effective ones being a valuable property. About the time that his facility and his industry began to decline the critics condemned his work as of slight artistic value, and his influence as deleterious to the development of sound art, though he has never lacked partisans and admirers. His ideal portrait of Longfellow's Evangeline, engraved, has been very popular in the United States.

Falguière, Jean Alexandre Joseph, a French sculptor, born in Toulouse, Sept. 7, 1831; died in Paris, April 19, 1900. He studied under Jouffroy, whom he succeeded in 1882 at the Academy of Fine Arts, exhibited in the Salon of 1857, obtained the Rome prize in 1859, and in 1865 sent home the Vainqueur au Combat des Coqs, his most famous piece of sculpture, which was purchased by the state. Others of his works are a statue of Lamartine at Macon, one of Gambetta at Cahors, Admiral Courbet at Abbeville, Lafayette at Washington, and Alphonse Daudet at Nîmes, this last completed immediately before his death. He executed numerous symbolical and historical sculptures of striking merit, designed public monuments, made many portrait busts, and was also a painter of repute. He became a professor in the National School of Art in 1882.

Falk, Paul, a German statesman, born in Metschkau, Silesia, in 1827; died in Hamm, Westphalia, July 7, 1900. He was the son of a Lutheran pastor, and was educated for the law at the University of Breslau, graduated as doctor, and appointed in 1847 public prosecutor at Lyck, East Prussia, where he was elected in 1858 to the Prussian Diet as a Liberal. He held a post in the Ministry of Justice, left the Chamber, and was appointed appellate judge at Glogau in 1862, returned to Berlin in 1868 as a member of the North German Parliament and of the Prussian Diet, was appointed reporter and counsel to the Ministry of Justice, and intrusted with the codification of the laws of the North German Confederation, and at the birth of the German Empire was nominated by the Emperor in February, 1871, Prussian Minister Plenipotentiary to the Federal Council. In 1872, when the conflict began between the German Government and the Roman Catholic Curia that lasted till the death of Pius IX, Bismarck selected Dr. Falk to be his lieutenant and adviser and the representative of the Government in the struggle, having need of a man of firmness and energy and of the most expert knowledge of laws and legislation. He was made Minister of Education and Worship, and in January, 1873, submitted to the Prussian Chamber the comprehensive scheme of legislation known as the May laws because they were passed in May, 1873, which laicized the national schools, restricted the jurisdiction of bishops over the clergy, extended the rights of the state regarding the appointment and the discipline of the clergy, and dissolved and expelled some of the religious orders. Under the administration of Dr. Falk these laws were applied with such perseverance and thoroughness that a bitter religious conflict resulted, rendering difficult the consolidation and development of the new empire. The Kulturkampf began over the school inspection law, which gave the Government the right to inspect private as well as public educational institutions. The bill was carried through both houses of the Prussian Diet in spite of the determined opposition of the numerous and well-organized Clerical, or Center, party. The Reichstag having passed an act against the Jesuits, Dr. Falk next issued an edict rendering members of their society ineligible for positions as teachers in the Prussian state schools. The general body of the May laws followed next, and for resisting their application the Government did not hesitate to punish bishops with fines and to close seminaries as well as monastic establishments. In 1874 the civil contract was rendered compulsory as a part of the marriage ceremony in Prussia. Supplementary legislation extended the May laws. For resisting them the Archbishops of Posen and Cologne and the Bishops of Paderborn and Treves were sent to prison. The

Pope declared the laws invalid and forbade the clergy to conform to them, and the imprisoned Archbishop Ledochowski he made a cardinal. The Prussian Government then suspended the stipends of the priests and bishops until they should be ready to sign a pledge to obey the laws. Other severe measures followed, until the clergy were brought to terms and only a dozen bishoprics remained vacant in Prussia when Pius IX died in February, 1878. Pope Leo XIII and Prince Bismarck were alike anxious to bring the conflict to an end, the latter on condition that the Center should support his new commercial and financial policy. Dr. Falk could not remain after the readjustment of amicable relations between the Catholic Church and the Government, especially since he had given offense to the Evangelical Protestant Church by his secularizing policy, and had never possessed the full confidence of the Emperor Wilhelm I. His resignation was tendered and accepted on July 14, 1879, and from that date he ceased to play a prominent part in politics, although he was a member of the Prussian Chamber of Deputies and of the Reichstag till 1882, when he was appointed president of the provincial court of Westphalia, a post which he filled with distinguished ability until his death.

Ferraris, Count Luigi, an Italian politician, born in Sostegno, March 6, 1813; died in Turin, Oct. 21, 1900. He studied and practiced law, and in 1848 was elected to the Chamber from Turin, in which he quickly attained a high position. In 1871 he was nominated an Italian Senator, having served as Minister of the Interior in the Menebrea Cabinet of 1869. In the first Cabinet formed by Rudini in 1891 he was Minister of Justice. He was an eminent juriconsult, and during a long period he was mayor of Turin.

Fibich, Zdenko, a Bohemian composer, born in Sebořschitz, Bohemia, Dec. 21, 1850; died in Prague, Oct. 16, 1900. He studied at Prague and Leipsic, and was a pupil of Vincenz Lachner. He was appointed assistant musical director of the National Theater of Prague in 1876, and in 1885 director of the Russian church choir. His operas, which were in Bohemian and were produced in Prague, were: Bakowin (1881); The Bride of Messina (1883); The Storm (1895); Hedy, the Haidee incident from Byron's Don Juan (1896); and Sarka (1898). Other works were: The music of Brechliky's dramatic trilogy Hippodamia (1891), and the symphonic poems Othello, Zboj and Slavoj, Toman and the Nymph, and Vesna. He was also the author of several orchestral overtures: Lustspiel Overture (1892); A Night on Karlstein, etc.: Spring Romanza; and songs and choruses. In 1899 he was appointed dramaturgist of the Bohemian National Theater, Prague.

Forbes, Archibald, a British journalist, born in Morayshire in 1838; died in London, March 29, 1900. He was the son of a Scottish minister, and studied in the University of Aberdeen, after which he enlisted in a dragoon regiment. When the Franco-German War broke out the London Daily News sent out the young Scotch journalist, who had practical experience of military life, to follow the German army. Sir W. H. Russell, by his letters to the London Times from the Crimea, had won a standing for the war correspondent as independent chronicler and military critic and opened a new and important field of newspaper activity and influence. Archibald Forbes impressed upon the new profession the character and style, and gave it the direction that its best exponents have followed since he sent his letters from the front in 1870. A vivid and rapid presentment of the broad features of the campaign, of the object of

each maneuver, of the dispositions of each battle, a graphic account of the fighting and of salient or picturesque details of the march, the camp, the reconnaissance, the skirmish, the strategic plans as far as they were disclosed or could be divined, the life and sentiments of the soldiers, were all interpreted in attractive, stirring newspaper language, lucid, and eloquent. Where he set the example for future correspondents in a still more important matter was in the speed with which he got his copy to London, so that the public could read his details of operations on the day after they had happened. He was the first to use the telegraph so extensively for newspaper correspondence. His enterprise, energy, ingenuity, and courage enabled him to see enough of every battle to give a graphic and discriminating account of the operation, and then he rode with the utmost speed, no matter how long the way, to where he could telegraph his letter to London. When the Prince of Wales visited India in 1875, Forbes went out to report in his picturesque style the incidents of the tour, and then was sent to the Balkan peninsula to watch the course of events in Serbia and describe the war with Turkey. When Russia intervened he accompanied the Russian army and added to his reputation by being present at all the important engagements—at Shipka Pass, at Plevna, and elsewhere—and describing them with a military acumen that had grown keener with practice. When he returned to England he lectured upon the events and incidents of the war and its political bearings and results. He went as a correspondent to Cyprus when Lord Beaconsfield acquired that island for British occupation, and when the Afghan War began he went to India. The Zulu War took him to South Africa. After the battle of Ulundi he rode 120 miles through an unknown region, reached the telegraph station, and telegraphed the news to London and also to Sir Garnet Wolseley, the commander in chief, and to Sir Bartle Frere, the High Commissioner, who sent the dispatch to the British Government, and it was read in both houses of Parliament before a line had been received from the official staff. That was the last campaign that Forbes reported. The fatigues and privations of war had sapped his great strength, and he chose a more restful life. He revised his correspondence and recast it into a historical narrative of the various campaigns that he had seen, making a large number of books, and he gave lectures in Great Britain, Australia, and America. His wife was a daughter of Gen. Meigs, of Washington. The intelligence and authority with which he was able to describe the greater operations of war, to learn all that was going on, and to be present at the key of the position and at the critical moment of every engagement was because he was the first army correspondent who was able to treat with military commanders on equal terms, to exact respect and consideration as a representative of the press, and thus to compel them to yield information that there was no military reason for longer retaining. They respected him and feared him somewhat as a military critic who judged the operations of war from a purely military standpoint, betraying no sympathy or political bias in his writings, and in his review of a movement frank and ready to point out the errors on whichever side they were committed, without pretension to strategical ability or technical learning, but with a practical insight and an intuitive appreciation of a military situation that seldom led him astray.

Gouthé-Soulard, Archbishop, born in Saint-Jean-la-Vêtre, Loire, Sept. 1, 1820; died Sept. 9, 1900. He studied for the priesthood in the grand

seminary of Lyons, took the degree of doctor in theology in 1854, and became vicar general of Lyons and *cure* of the important parish of Vaise in 1877. Premier Goblet, contrary to the universal practice of selecting metropolitans from among the bishops, nominated him Archbishop of Aix, and he was consecrated on July 25, 1886. When in 1891, in consequence of an agitation provoked in Rome by French pilgrims, M. Fallières requested the bishops to suspend the pilgrimages that they had arranged, Monsignor Gouthé-Soulard responded in a letter, for which he was condemned by the Paris Court of Appeals on the charge of insulting the Government. He published thereupon *Mon Procès, mes Avocats*, in which were collected the encomiums he had received from the French clergy for his attitude. His resistance led to parliamentary incidents that resulted in the fall of the Fallières ministry. This was the beginning of several contests with the Government, in the course of which he was deprived of his allowance. In June, 1892, the Archbishop of Aix was condemned for an electoral abuse in publishing a catechism for voters.

Gregory, Benjamin, an English clergyman, born in 1820; died Aug. 24, 1900. He became a Wesleyan preacher in 1840, and was long a conspicuous figure in his denomination. He was the author of *Memoir of Emma Tatham* (London, 1859); *The Thorough Business Man: Memoirs of Walter Powell, Merchant* (1871); *The Holy Catholic Church, the Communion of Saints* (1873); *Sermons, Addresses, and Pastoral Letters* (1881); *The Life of F. J. Jobson* (1884); *Consecrated Culture* (1885); *Handbook of Scriptural Church Principles of Wesleyan Methodist Polity and History* (1888); *Side Lights on the Conflicts of Methodism*, which revealed the author as not so strictly conservative as he had usually been considered (1898).

Grimaux, Édouard, a French chemist, born in Rochefort in 1835; died May 2, 1900. He studied medicine and was surgeon on a naval vessel before he studied chemistry under Wurtz in Paris, and was appointed assistant in the Polytechnic School in 1874, becoming professor in succession to Cahours, and also holding a professorship in the Agronomic Institute. He was elected to the Academy of Sciences in 1894. He lost his chair in the Polytechnic School because he publicly declared his belief in the innocence of Dreyfus during the Zola trial, and subsequently he became a vice-president of the Rights of Man League. He published a treatise on *hasheesh* in 1865, one on equivalents, atoms, and molecules in 1866, organic chemistry in 1872, elementary inorganic chemistry in 1874, chemical theories and notations in 1884, and a study of Lavoisier in 1888.

Grove, Sir George, an English musical critic, born in London, Aug. 13, 1820; died there, May 28, 1900. He was articled to an engineer after leaving Clapham Grammar School, worked for two years in a factory near Glasgow, was employed in building the lighthouse on Morant Point in Jamaica in 1841, and that on Gibb's Hill in Bermuda in 1845, and after his return to England in the construction of the Britannia bridge. He became secretary of the Society of Arts in 1849, became one of the managers of the Crystal Palace, and had a part in organizing the concerts which began in 1855, and thenceforth his name was associated with musical matters rather than with the profession in which he had first made his mark, although in music he had only the training of an amateur. He wrote notes and analyses of the Crystal Palace concerts for the programmes that served to impart to friends of

music among the general public something of his own enthusiasm for the higher delights of music to which people of popular tastes had not awakened, and which they could not have caught from the technical criticisms of a writer professionally educated. From 1868 to 1883 he edited Macmillan's Magazine and labored on the Dictionary of Music and Musicians, begun in 1868 and completed in 1889. When the Royal College of Music was founded in 1882 he was made its first director, retiring in 1894 from the post. He published analyses of Beethoven's symphonies in 1896, having given to that composer and to Mendelssohn and Schubert a degree of attention in his dictionary that was somewhat out of proportion to the geography and antiquities, of which he wrote an account for Smith's Dictionary of the Bible. He was knighted in 1882.

Haller, Johann, an Austrian prelate, born April 30, 1825; died in Salzburg in April, 1900. He was Prince Archbishop of Salzburg, and was created a cardinal on Nov. 29, 1895.

Halvorsen, Jens Braage, a Norwegian lexicographer, born in Bergen, March 7, 1845; died at Christiania, Norway, Feb. 22, 1900. He was head librarian at the Royal Library of Christiania, and editor for Norway of Salmonsen's Danish-Norwegian Conversations-Lexicon. He was a man of great erudition, and was the leading bibliographer of the three Scandinavian countries. His monumental work, a Dictionary of Norwegian Writers, 1814-1880, in many volumes, was nearly completed at the time of his death.

Harper, Henry Andrew, an English artist and author, born about 1835; died Nov. 3, 1900. His work, both as painter and as writer, was mainly concerned with the Holy Land, and for a quarter of a century he was on the executive committee of the Palestine Exploration Fund. Besides painting the popular picture Mount Sinai, he published Illustrated Letters to my Children from the Holy Land (1880); Walks in Palestine (1888); The Bible and Modern Discoveries (1889); From Abraham to David: The Story of their Country and their Times (1892).

Harrowby, Dudley Francis Stuart Ryder, Earl of, born in 1831; died in Sandon Hall, Staffordshire, March 26, 1900. He was the son of the second Earl of Harrowby, and was educated at Harrow and Christ Church, Oxford, where he took his degree in 1853. As Viscount Sandon he entered Parliament in 1856 as a Liberal Conservative, and sat without a contest for Litchfield till 1859. In 1860 he unsuccessfully contested Stafford as a Conservative. In 1868 he was elected as one of the members for Liverpool, which he continued to represent till he succeeded to the peerage in 1882. He held a subordinate post in Lord Beaconsfield's ministry in 1874, that of vice-president of the Committee of the Council on Education, and in 1878 he was admitted to the Cabinet as President of the Board of Trade, having twice refused the chief secretaryship for Ireland. In Lord Salisbury's Government, formed in June, 1885, he was Lord Privy Seal. He was interested in education and was elected to the London School Board in 1873, and in 1886 he served on the royal Commission on Education. He was intimately associated, as his father had been, with the evangelical party in the English Church, and consequently when Lord Shaftesbury died he was elected as the latter's successor in the presidency of various Protestant societies, and became the chief adviser of the Earl of Beaconsfield in the selection of candidates for ecclesiastical offices.

Hatzfeld, Adolphe, a French scholar, born in Paris in 1824; died Oct. 6, 1900. He was of Jew-

ish birth, but early in life became a Roman Catholic. He published an essay on the Republic of Plato in 1850, conducted the *Revue Critique et Bibliographique* in 1864, and was for many years Professor of Rhetoric at the Lycée Louis-le-Grand. With the late Arsène Darmesteter he edited *Morceaux Choisis des Principaux l'Écrivains du XVI^e Siècle*, a very popular work (1876); *La Seizième Siècle en France* (1878); and the important *Dictionnaire Général de la Langue Française*, which occupied nearly thirty years in preparation, the work being completed just in time to receive the Grand Prix at the Paris Exposition of 1900. With Georges Meunier he published *Les Critiques Littéraires du XIX^e Siècle*. He was also the author of a work upon St. Augustine.

Hawkins, Frederick, an English author, born in 1849; died June 30, 1900. He became connected with the London Times in 1863, his father being then employed upon it, and from 1876 to 1894 was on the editorial staff of that paper. He was always greatly interested in matters pertaining to the stage, and was editor of *The Theater* 1877-'79 and 1895-'98, the paper ceasing to exist in the last-named year. He published a *Life of Edmund Kean* (1869); *Annals of the French Stage to the Death of Racine*, a work of permanent value (1884); and *The French Stage in the Eighteenth Century* (1888).

Heyden, Karel van den, a Dutch soldier, born in Batavia, Jan. 12, 1826; died in Bronbeck, near Arnheim, Jan. 26, 1900. He was taken as a child to Holland and was educated there, enlisted as a common soldier in the Dutch East Indian army at the age of fifteen, won his epaulettes on the battlefield, and rose through all the grades to the highest in the Dutch army, that of lieutenant general, which he attained in 1881. He was in the Bali, Palembang, and Borneo campaigns, and from 1874 till 1880 was commander in chief of the troops in Acheen. In the battle of Samalangan he was shot in the eye. No commander before him had met with such success against the rebels of Sumatra. At the stage when they seemed ready to surrender the Government policy changed, and he was removed from his post as Military Governor of Acheen and replaced by a civil official. He returned to Holland in 1881, was retired from active service in the following year, and passed the remainder of his life as governor of the military asylum at Bronbeck.

Holm, Adolf, a German historian, born in 1830; died in Freiburg, June 9, 1900. He was educated in German universities, went to Italy to devote himself to the study of classic antiquities, was called to the chair of Ancient History in the University of Palermo, and after several years of residence there took the same chair in Naples, holding it till he retired and returned to his native country a year before his death. He published the first volume of his important historical work on the ancient history of Sicily in 1870, and completed it in 1898. He wrote also a history of Greece, which has been translated into English.

Horner, Ann Susan, an English artist and author; died Dec. 2, 1900. She was the daughter of Leonard Horner, an eminent naturalist, and a niece of Francis Horner. From an early age she devoted herself to painting and sculpture, attaining proficiency in both arts, although she never followed either of them as a profession. For many years her home was in Florence, and afterward in Paris, but her latest years were passed in London. Her writings include *Hungary and its Revolutions from the Earliest Period to the Nineteenth Century* (1854); *A Translation of Colleta's History of Naples*, with supplement

bringing it up to 1856 (1858); *A Century of Despotism in Naples and Sicily* (1860); *The Tuscan Poet, Giuseppe Giusti, and his Times* (1864); *A Translation of Gervinus's Introduction to the History of the Nineteenth Century*; *Isolina, or the Actor's Daughter* (1875); *Walks in Florence* (with Joanna Horner) (1875; reissued 1877); *Greek Vases, Historical and Descriptive* (1898).

Hughes, Edward, an English electrician, born in London, May 16, 1831; died there, Jan. 22, 1900. He went to the United States as a boy, showed such talent for music that he was engaged as a teacher in Bardstown, Ky., and afterward became Professor of Natural Philosophy in the college there. In 1855 he invented the type-printing telegraph instrument, which, by means of wheels revolving synchronously at both ends of the wire, enables the operator when he strikes a letter on a keyboard like that of the typewriting machine, to cause the receiving instrument at the other end to print the same letter on a continuous strip of paper. It was adopted in the United States in competition with the Morse system. He went to England in 1857, but could not induce the telegraph companies to try his invention. It was accepted by the French Government for its important lines in 1861, and subsequently by other Continental governments. In 1878 Prof. Hughes made public his discovery of the microphone, and his experiments in connection with it, which not only enabled the inventors of the telephone to construct instruments sensitive enough to be of practical use, but anticipated in some measure the later discovery of wireless telegraphy. He discovered that a divided electrical conductor, such as metallic particles or wires in loose contact, when introduced into a circuit, are sensitive to sound, and produce an undulatory electrical current with waves corresponding to the sonorous waves, the molecules arranging themselves in such manner as to increase or decrease the electrical resistance. By experimenting with such broken conductors he was able to detect electric waves, and succeeded in transmitting signals by such waves for a distance of 500 yards without wires. Prof. Hughes invented also the induction balance, an electrical contrivance that has been employed to test the sensitiveness of hearing, to detect the position of a bullet in a wounded man, and to locate ores under the earth. He published various investigations in electricity and magnetism, and was admitted into the Royal Society in 1880.

Humbert I., King of Italy, born in Turin, March 14, 1844; died in Monza, July 29, 1900. (For portrait see *Annual Cyclopædia* for 1884, page 412.) He was the eldest son of Victor Emmanuel II and Archduchess Adelaide of Austria, and as a boy he accompanied his father in the Austrian campaign of 1859. Before the war of 1866 he had gone to Paris to sound the Emperor Napoleon III as to the attitude he would take in regard to an alliance of Italy with Prussia against Austria, and when hostilities began he took command of a division in Gen. Cialdini's army, which was defeated by the Austrians under the Archduke Albrecht at Custoza. He, by his prompt and able tactics and his personal bravery, which he had in common with all the members of the house of Savoy, extricated the army from its desperate situation, forming his regiments into squares to hold back the Austrian cavalry, and inspiring his men by placing himself in the most exposed position until Gen. Bixio brought up his force to help cover the retreat. He had a considerable part in the reorganization of the Italian army that was the work of the succeeding period. When Rome was occupied in 1870 he received the

command of the Roman corps and took up his residence in the new capital with his wife, Princess Marguerite of Savoy, his cousin, whom he had married in 1868. He visited the court of Prussia in 1872, the Russian court in 1873, and in 1875 he went to Vienna, afterward going to England incognito. In 1878 he succeeded his father as King of Italy, in a time of financial embarrassment, economic depression, disappointed national ambition, and internal discord, when the tariff war with France was at its height, when the Clericals, the Irredentists, and the Republicans were assailing the Government and its policy, and the socialists and anarchists were lifting their heads, and when the friends of the monarchy felt disheartened and humiliated because Italy, notwithstanding the sacrifices the people had been called upon to make and the crushing burdens imposed upon them, had gained no apparent advantage from such sacrifices and burdens and had returned empty-handed from the Congress of Berlin. The period of ministerial instability had already begun. King Humbert was personally popular, and the attempt of Passanante to stab him when he visited Naples in November, 1878, tended to strengthen his position except with those who aimed to sweep the monarchy away. But the dangers and difficulties of the Government increased, and of the statesmen who succeeded each other at the helm—Depretis, then Cairoli, then Zanardelli, then the Cairoli-Depretis coalition—none seemed able to guide the ship off the shoals. When France occupied Tunis in 1881 Italians saw all their hopes of greatness dispelled, and began to regret the unification that had cost so much and brought no substantial return. In this moment of despair and isolation Bismarck offered the triple alliance. Humbert visited Vienna in October, 1881, as the first move toward closer relations between Italy and the two empires of central Europe. Energetic measures were taken to strengthen the naval and military forces of the kingdom as the condition of the alliance to be fulfilled by Italy. At the same time, despite the additional outlay, the ministers succeeded in bringing about a temporary equilibrium in the budget and abolishing the forced paper currency. The parliamentary situation also became more settled, and Depretis, until he died, was able to command a working majority in the Chamber. The definite treaty of defensive alliance between Italy, Austria-Hungary, and Germany was concluded on March 13, 1887, supplementing and strengthening the Austro-German alliance that had existed since 1879. This led to a renewal of the tariff war with France in 1888, which dealt a staggering blow to Italian commerce and industry. The secret Mediterranean naval alliance with England, which had been arranged meantime, had lured Italy, which with the encouragement of England occupied Massowah in 1885, hoping to redeem some of the prestige lost by the encroachments of France upon the chosen Italian sphere in northern Africa, into a desperate situation on the Red Sea. The colonial enterprise in Erythrea was a serious drain on the financial resources of the country, already overburdened with taxation. Humbert was a strictly constitutional king, who never intervened in domestic politics at that time, following his father's example and his dying injunction to be always the jealous custodian of liberty, but in foreign affairs he insisted on letting his voice be heard in critical junctures. When Crispi fell in 1891 and the Rudini Cabinet was formed, it was the King's influence that prevented a weakening or rupture of the triple alliance and

a *rapprochement* with France, and it was he who encouraged the ministers to persevere in the colonial policy, though the reduction of military expenditures was necessary. The King visited Berlin once more to demonstrate adherence to the alliance. With Crispi's return to power the old policy was continued with more vigor until the disaster of Adowa in 1896 caused his final fall, endangered the dynasty even, and compelled the abandonment of the Abyssinian enterprise, and extinguished the hope of a colonial empire. The reverse to Italian arms actually brought about a better situation at home after the popular passions had subsided. The Government amnestied all political prisoners and endeavored to conciliate the revolutionary elements. Normal relations were restored between Italy and France by the renunciation of Italian pretensions in Tunis, and a commercial treaty was concluded in November, 1898. No sooner were external relations comfortable again than unrest and discord began to disturb the internal situation. When another anarchist, Acciarato, attempted to kill Humbert before the gates of Rome on April 22, 1897, the popular affection and respect for the simple soldier King were shown not less unmistakably than on the previous occasion. In the following year the proceedings of the Government in suppressing the labor disturbances in Milan and other cities affected the popularity of the King, and when he signed the decrees that Gen. Pelloux considered necessary to give him power to preserve public order in spite of parliamentary obstruction, the King was involved in the odium created by the stern repressive policy of his ministers because the constitutionality of such extra-parliamentary legislation was denied by the Radicals. No reasoned political incentives can be attributed, however, to the murderous acts of fanatical Italian anarchists, who choose as victims the most conspicuous representatives of the ranks and distinctions that excite their malice and hatred, and strike down a shining mark, such as a President of the French Republic or an Empress of Austria, to give distinction to their own exit from a world whose conditions disgust them with life. The assassin who shot King Humbert, going from the United States expressly for the purpose, was not rendered desperate by poverty, nor was he personally affected by the arbitrary acts of the Italian Government that caused the agitation, nor an immediate member of the community in which the grievances were felt, but a skilled workman who lived in the United States, earning good wages and saving money. King Humbert had but one child, Victor Emmanuel, Prince of Naples, who succeeded him as King. His eldest sister, Princess Clotilde, is the widow of Prince Bonaparte. His deceased brother Amadeus, who occupied the Spanish throne from 1870 to 1875, left four sons—Emmanuel, the present Duke of Aosta; Victor, Count of Turin; Louis, Duke of Abruzzi; and Humbert, Count of Salemi. His younger sister, Princess Pia, is the widow of the late King Louis I of Portugal. The house of Savoy is one of the most ancient now occupying a European throne, being traced to a German Count Berthold, whose domain in the eleventh century was in the Alps between Lake Lemman and Mont Blanc and whose descendants at different periods acquired Turin and Susa, Nice, Piedmont, Sicily, afterward exchanged for Sardinia, and Genoa. The younger branch of Savoy-Carignano succeeded in the person of Charles Albert to the kingdom of Sardinia when the direct male line died out in 1831, and Victor Emmanuel II, in whose favor his father abdicated in 1849, obtained

Lombardy in 1859, and assumed the part of unifier of Italy. The annexation of Parma, Modena, the Romagna, and Tuscany to Sardinia was effected by the free vote of the people, who expelled their former rulers and welcomed the liberating army early in 1860, as did the people of Sicily and Naples, a section of the Papal States, the Marches, and Umbria later in the year, and Rome after the withdrawal of the French garrison in 1870. The King of Italy has a civil list of 15,050,000 francs a year, out of which he must pay the allowances of other members of his family.

Hunter, Sir William Wilson, an English civil servant, born July 15, 1840; died near Oxford, England, Feb. 7, 1900. He was educated at the University of Glasgow, at Paris, and at Bonn, and entered the Bengal civil service in 1862. His energy and ability met with suitable recognition, and by 1871 he had become undersecretary to the Government of India and director general of statistics. He was a member of the Viceroy's Legislative Council, 1881-'87, and in the latter year retired from the civil service. He had written largely before his return to England in 1887, and after that event continued his literary pursuits, and was a frequent contributor to the Times. His writings include *A Comparative Dictionary of the Languages of India and High Asia* (London, 1868); *The Annals of Rural Bengal*, perhaps his best work (1872); *The Uncertainties of Indian Finance* (Calcutta, 1869); *Orissa* (1872); *A Life of the Earl of Mayo* (1875); *A Statistical Account of Bengal* (1875-'77); *A Statistical Account of Assam* (1880); *England's Work in India* (1881); *The Imperial Gazetteer of India* (1885-'87); *The Indian Empire: Its History, People, and Products* (1882); *A Brief History of the Indian People* (1884); *Life and Work of the Marquess of Dalhousie*; *Life of Brian Hodgson* (1890); *The Old Missionary* (1896); *The Thackerays in India* (1897); *A History of British India* (Vol. I, 1899).

Jacobini, Domenico, an Italian ecclesiastic, born in Rome, Sept. 3, 1837; died there, Feb. 1, 1900. He was of no patrician family, although the only Roman in the Sacred College, but the son of the steward of an estate. After studying in the Roman seminary he became a tutor in Greek after his ordination, worked for a time in the archives of the Propaganda, passed into the Congregation of Briefs in 1874, was appointed papal house chaplain soon after and a canon of St. Peter's, and in 1881 was made Archbishop of Tyre. A year later he was appointed secretary of the Propaganda. While filling this office and previously he took a leading part in organizing the Clerical political forces, helping to found Catholic workingmen's societies and electoral unions. He alone among the clergy joined Prince Borghese and other laymen in the request to Leo XIII to recall the papal command prohibiting Italian Catholics from voting in the national elections. This act destroyed for the time his influence at the Vatican and brought upon him various embarrassments. In 1891 he was sent away from Rome as papal nuncio at Lisbon, where he won great influence and regained the favor of the Vatican by inducing the Government and King of Portugal to cancel the promised visit of the King to the Italian court in 1895. After this diplomatic success Jacobini was made a cardinal, June 22, 1896, and he was protector of the theological academy until in November, 1899, he was appointed cardinal vicar for the Roman diocese.

Johnson, Samuel, an English actor, born in Ayrshire, Scotland, in 1831; died in London, Feb. 15, 1900. He was a son of an actor and manager of the same name, well known in Scotland in the

last century. His first appearance was in the part of Bartolo in *The Wife*, at the Maryport Theater, Cumberland, in 1845. He became manager of the Theater Royal, Sheffield, in partnership with John Coleman, in 1853, and there produced *Uncle Tom's Cabin*, which had a run of forty nights—extraordinary for that period. He became a member of the Lyceum Theater, Sunderland, in 1855, playing the comedy rôles. This theater having been burned, Dec. 25, 1855, he went to Newcastle-on-Tyne, and when the Lyceum was reopened returned for the opening in September, 1856, when Mr. Henry Irving made his first appearance. His London *début* was at the Lyceum in 1859, when he played Cassim Baba in *The Forty Thieves*. In 1860 he began a three years' service as comedian of the Theater Royal, Edinburgh. Oct. 10, 1864, he began a ten years' engagement at the Theater Royal, Dublin. He was very popular in Ireland, and besides playing the standard comedy parts he was a favorite in Shaun the Post, Myles-na-Coppaleen, and Conn the Shaughraun. He was then for four years the comedian of the Theater Royal, Belfast, and when Henry Irving began his management of the Lyceum Theater, London, Dec. 30, 1878, with *Hamlet*, Mr. Johnson was the comedian of the company. He remained a member of the Irving company until the end of the season of 1898—twenty years of continuous service. His last appearance was in the part of Maître Van Spennen in *The Black Tulip*.

Joinville, François Ferdinand Philippe d'Orléans, Prince de, born in Neuilly castle, Aug. 18, 1818; died in Paris, June 17, 1900. He was the third son of Louis Philippe, King of the French, younger than the Duc d'Orléans and the Duc de Nemours, but older than the Duc d'Aumale and the Duc de Montpensier, and he survived all his brothers. He chose a naval career, went to sea at the age of thirteen, and became a favorite with the French navy and the most popular of the Orleans princes, devoting himself entirely to his profession. In 1837 he commanded a vessel in the Mediterranean and saw vigorous service. He commanded a corvette in Admiral Baudin's expedition to Mexico, taking part in the bombardment of San Juan d'Ulloa and leading the storming party into the gate of Vera Cruz. Later he was sent to St. Helena to bring Napoleon's ashes back to France. He married Donna Francesca de Braganza, sister of Dom Pedro II, Emperor of Brazil, on May 1, 1843, while visiting Rio de Janeiro in his ship. In 1845 he commanded a squadron in Marshal Bugeaud's expedition against Morocco, and with his ships he bombarded Tangier and took Mogador, gaining the rank of vice-admiral. He was in command of a squadron at Algiers, where the Duc d'Aumale was governor general, when the revolution of 1848 broke out, and after their father's deposition both brothers resigned their commands to the republican authorities and sailed for England to join the rest of the family at Claremont. In 1849 a party rose in France that wished to elect the Prince de Joinville to the office of President of the French Republic. When Napoleon III overrode the republic he was disquieted by the popularity of the Duc d'Aumale and the Prince de Joinville, although they did not conspire or do aught to stimulate it, and in 1852 the Emperor confiscated the Orleans estates. The Prince de Joinville was in the United States with his son and the Comte de Paris and the Duc de Chartres when the civil war was going on in the United States. His two nephews obtained commissions and were attached to the headquarters staff, while he remained with them in Gen. McClellan's camp. They saw much active

service before the French intervention in Mexico seemed likely to involve France in a war with the United States, when they resigned and departed. The Prince de Joinville had witnessed the principal actions of the Virginian campaign of 1862, and he wrote an impartial account of them in an article printed in the *Revue des Deux Mondes*. When the Franco-Prussian War broke out all the Orleans princes offered their services to Gen. Trochu, and were refused. Nevertheless the Prince de Joinville succeeded in entering under the name of Col. Lutheroth, and served with the army of the Loire in the operations around Orleans. Gambetta concluded then that a French prince was dangerous in the army, even when fighting incognito, and after detaining him five days at Le Mans sent him back to England. When the law of banishment against his family was abrogated on June 8, 1871, he returned to France, having already been elected a member of the National Assembly for the department of Haute Marne, and he took his seat, breaking, according to the statement of Thiers, a promise he had made. He and the Duc d'Aumale discreetly refrained from speaking or voting on political questions. The repeal of the law of banishment had been carried by an anti-republican majority as a preliminary step toward the restoration of the monarchy, yet after the princes had been some time in the country the republican Government relaxed its proscriptions still further by restoring a part of the Orleans properties. Although the Prince de Joinville helped to bring about the fall of Thiers in 1873, he did not vote for the new Constitution, and in 1876 he requested his electors not to send him back to the Chamber. He had taken no active part in the efforts to bring about a reconciliation between the house of France, as the main stem of the Bourbon family was called by the Legitimists, and the Orleans branch. He went with the Comte de Paris, however, to Frohsdorf to render homage to the Comte de Chambord in token of the acceptance of his nephew, the head of the Orleans branch, as the legitimate heir to the French throne and the consequent fusion of the Legitimists and the Orleanists into one political party. When the last representative of the direct line was buried in Frohsdorf, in 1883, he went with the rest of the Orleans family to the funeral. The union of the two royalist parties and the accession of some of the Bonapartists in support of the pretensions of the Comte de Paris created a new political situation; and when in the elections of 1885 the Conservatives increased their strength in the Chamber from 80 to 210 out of 580 members the Republican majority sanctioned various repressive measures culminating in the renewal of the law of exile in 1886, denying the right to live or sojourn in France of pretenders or their eldest sons. The Prince de Joinville with the rest of his family went into exile once again. The prince had a finely cultured mind and most affable manners. In military and naval matters he always took the deepest interest, and in all questions of the day he was well informed. The Princess de Joinville died in 1898, leaving two children—Françoise Marie Amelie, born in 1844 and married to the Duc de Chartres, and Pierre Philippe, Duc de Penthievre, born in 1845, who was a cadet at the naval academy in Annapolis while his father was in the United States. The Prince de Joinville was the author of studies that were highly praised on navies and maritime warfare. When the second law exiling the heads of families that once reigned was enacted it excluded from office all other members of the dynastic families, and thus the Prince de Joinville lost his rank as vice-admiral of the French navy.

Jones, Harry, an English clergyman, born Dec. 8, 1823; died at Bury St. Edmund's, Sept. 30, 1900. He was educated at Cambridge, and after being admitted to holy orders in 1848 was a curate at Baddow, in Essex, till 1850. He held other curacies until his appointment in 1858 to the vicarage of St. Luke's, Berwick Street, near the famous Seven Dials district of London. He remained fourteen years in this parish, then one of the worst of the London slums, and was rector of St. George's-in-the-East, 1873-'82. For the next three years he was vicar of the rural parish of Great Barton, and then, returning to London, was rector of St. Peter's, Great Windmill Street, 1882-'85; St. Philip's, Regent Street; and from 1897 rector of St. Vedast's, Foster Lane. He became a prebendary of St. Paul's Cathedral in 1880, and was for ten years a chaplain in ordinary to the Queen. He traveled extensively on the Continent in his various summer holidays, and was a war correspondent at the battle of Sedan. Although he did not ally himself definitely with any party in the Church, his sympathies lay naturally with Maurice and Kingsley, and he would have been classed with Broad Churchmen, if classed at all. He was an indefatigable worker among the London poor, with whom he was exceedingly popular. He was a favorite, however, with men of all ranks. His published books comprise *Conscience versus the Quarterly: A Plea for Fair Play toward the Writers of the Essays and Reviews* (1861); *The Church of England and Common Sense* (1864); *Holiday Papers* (1864-'89); *The Regular Swiss Round in Three Trips* (1865); *Life in the World* (1865); *Priest and Parish* (1866); *The Perfect Man* (1869); *East and West London: Being Notes of Common Life* (1875); *Past and Present in the East* (1881); *Social Science* (1887); *Dead Leaves and Living Seeds*.

Joubert, Petrus Jacobus, a Boer soldier, born in Cango, Cape Colony, in 1834; died in Pretoria, March 27, 1900. He was an orphan child of



well-to-do parents, descended from a Huguenot refugee who went to South Africa when the edict of Nantes was revoked in 1687. He received an elementary education, accompanied traders who traveled with wine and spirits through the Boer republics, and when he arrived at manhood settled in the Wakkerstroom district of the Transvaal as a farmer. His intelligence, shrewdness,

and enterprise made him a man of mark in that community, and his knowledge of business and law and his reputation for probity and judicial discrimination led to his being frequently called upon to settle disputes between his neighbors, this to his giving up farming for the law, and this in turn to his being elected, about 1863, to the Volksraad as member for Wakkerstroom. He was re-elected, received the appointment of Attorney-General, and acted as President of the republic during President Burger's visit to Europe in 1874. When the ambitious improvements undertaken by President Burger bankrupted the treasury, and his unorthodox and modern views alienated the old-fashioned Boers, the traders in

the towns, mostly newcomers, welcomed British annexation. From the beginning of the British administration Paul Kruger and Piet Joubert, who had withdrawn from political life during the period of confusion and financial insolvency, began a bitter opposition against Sir Theophilus Shepstone, the British Commissioner. Joubert accompanied Kruger and the committee of the Volksraad that went to England in the hope of securing by friendly negotiation the restoration of independence. He refused offers of well-paid posts in the British administration, and took the leading part in getting all the Boers to sign a protest against annexation. When a committee went to Sir Bartle Frere in Natal to present the protest, Slim Piet, or crafty Piet, as he was nicknamed, carried on the negotiations with the British High Commissioner as the spokesman and advocate of the burghers. He was more active and determined even than Kruger in keeping up the agitation against British rule, and when the burghers decided on armed resistance and established a Provisional Government in 1880 he became a member of the triumvirate charged with the conduct of the war. While Kruger assumed control of diplomatic negotiations Joubert was made commandant general of the Boer forces, which at first were not disposed to take orders from a commander in chief, but which he succeeded in thoroughly organizing and impressing with his generalship as the war proceeded. He commanded at Laing's Nek, Ingogo, and Majuba, defeating the British every time. In the last engagement, fought on Feb. 27, 1881, he scaled a table mountain where the British were encamped, gained a commanding eminence with his small force without being observed, and opened a sudden rifle fire that caused the British regulars to run in a wild rout from a tenth of their numbers. This ended the war. Joubert conducted the earlier peace negotiations. After the retrocession the Invincible, as he was now called, was retained in the post of commandant general, and could not attain the presidency because the burghers would not feel safe with any other general at the head of their military organization. He was a member of the commission that superintended the location and government of the natives in the Transvaal. In 1893 he was put forward as the candidate for the presidency of the party that opposed President Kruger on account of his favoring Hollanders and granting monopolies, and his resistance to the demands of the Uitlanders for a wider franchise and favorable legislation. He received 7,009 votes, only 872 fewer than Paul Kruger, but when he ran again in 1898 he got no more than 2,001. He advocated a policy of greater liberality toward Uitlanders, and thus it came that some of his countrymen suspected him of treachery when the country magazines were found to be ill supplied with ammunition at the time of the Johannesburg rising. His vote in the Executive Council was generally given in favor of conciliatory measures, yet he advocated severe punishment for Dr. Jameson and his raiders. Nevertheless, the friends of President Kruger put him out of his office of Superintendent of Native Affairs, and threatened his post of commandant general. There was no open breach in the old friendship of the rival politicians; Kruger knew how necessary to himself and to the republic were the good will and assistance of the most popular politician in South Africa, and the only soldier whom the Transvaalers would follow with confidence into battle. Joubert was acting President when Kruger was in Europe in 1883 and 1884 negotiating for the withdrawal of British suzerainty

over the Transvaal. In 1891 the commandant general went to Europe to select arms for the defense of the independence of the republic. The training and tactics of the Boer army were the work of Joubert, who was well versed in military science and history, and who studied out the methods of administration, discipline, and fighting that were best adapted to the character of the Boers and the conditions and conformation of their country. When the war came and the Boers marched into the war his general plan of campaign was good, but owing to his own lack of energy and promptitude, the effect perhaps of growing old or of his pacific leanings, owing also to the want of co-operation and obedience on the part of the commanders, always more marked in the Boer army at the beginning of a campaign than in other armies, it was not successful either in Natal or in Cape Colony; and he might have chosen a better plan, more likely to succeed, that of an immediate invasion of Cape Colony, had not sectional jealousy prevented, and the unwillingness of the Boers to leave their homes unprotected. Indecision and excessive caution, undue deference to the opinions of his subordinates, and acquiescence in their independent movements, characterized his conduct of the campaign in Natal, which was carried on with more vigor after he was compelled by infirmity of health to leave the front. His death was sudden and unexpected. Gen. Louis Botha, the victor at Spion Kop and on the Tugela, succeeded to the supreme command. Piet Joubert was a typical Boer of the old sort, understanding farming and cattle breeding as well as any one, keen at a bargain, yet ready to sacrifice selfish and pecuniary interests for the public good, simple and frugal in his habits, plain and frank of speech, kindly, unassuming, such a man as the Boers like and admire; none was more popular among all the Dutch of South Africa. And he had intellectual gifts of a remarkable kind, and an ability to use them that gave him recognition and weight. There was no malice or depreciation implied in the epithet *slim*. His mental activity, facility, and versatility, and his thirst for knowledge, made him almost a master of jurisprudence, history, politics, and strategy, and he was the master of a noble, forcible, and eloquent style of writing, and made frequent use of his ready pen.

Ketteler, Baron K. von, a German diplomatist, died in Pekin, China, June 18, 1900. He was a nephew of the celebrated Bishop of Mayence, and was trained first for a military life. He resigned his commission as a Prussian officer in 1882 to enter the German legation in China as a student interpreter, was transferred to Canton, and the courage and understanding that he displayed in saving Germans and other Europeans during the disturbances of 1883 gained for him the order of the Red Eagle. He returned to Pekin, filled as substitute for a time the post of consul in Tientsin, was transferred in 1890 to Washington as secretary of legation, was appointed minister to Mexico in 1895 after marrying an American lady, and in 1899 returned to China to succeed Baron von Heyking as minister plenipotentiary at Pekin. He could speak Chinese with ease, and for this reason and because of the German activity in Shantung took the lead in making representations and uttering warnings to the Chinese Government when the Boxer troubles began in northern China. He was engaged in such an errand when he was shot in the street by a Chinese patrol (see CHINA).

Kingsley, Mary H., an English traveler and writer, born about 1805; died in Simonstown,

Cape Colony, June 5, 1900. She was the daughter of Dr. George Kingsley, a brother of Charles Kingsley. She was known principally in relation to west Africa through her books and lectures. Her statements are all founded on personal observation, and in one of her books, *West African Studies*, she criticises with considerable sharpness the system of government adopted for the Crown colonies of West Africa. Early in 1900 she went to South Africa as a special correspondent, and soon after arriving there offered her services as nurse in the military hospital at Simonstown. While engaged in this work she contracted the illness of which she died. Her published books include *Travels in West Africa* (1897); *West African Studies* (1899); and *The Story of West Africa* (1900). Her style was both original and distinctive, displaying at times a peculiar quality that might almost be called sardonic, and is seldom found in a woman's writing.

Lankester, Mrs. Phoebe (Pope), an English writer on popular science, born in Manchester, England, in 1825; died in London, April 9, 1900. She was the daughter of a manufacturer, and in 1845 married Dr. Edwin Lankester, and subsequently assisted her husband in preparing articles for the *Penny Cyclopædia* and the *English Cyclopædia*. She was the mother of eleven children, one of whom is the noted scientist, Prof. E. Ray Lankester. Her published works comprise *Wild Flowers worth Notice* (1861); the literary portion of *Sowerby's British Botany*; *Talks about Health* (1874); and *Talks about Plants* (1878).

Lavroff, Pierre, a Russian revolutionist, born in 1821; died in Paris in the beginning of February, 1900. He was of noble birth and entered the army, becoming an eminent professor in the St. Petersburg military academy. His contributions to various Russian periodicals roused the suspicion of the authorities, and after the attempt of Karakasoff on the life of Alexander II he was proved to have held relations with the nihilist conspirators, for which he was deprived of his rank of colonel of artillery in the guards and relegated to the government of Vologda, whence he escaped. Going to France, he entered into relations with Bakunin and plunged into the revolutionary agitation. After staying for a while in Zurich and then in London, consorting with other nihilists in exile, he returned to Paris and assisted in editing an anthropological review. He was expelled in 1882, but returned again and remained in Paris thenceforward.

Lawes, Sir John Bennett, an English agriculturist, born in Hertfordshire in 1814; died there, Aug. 31, 1900. He was educated at Eton and Brasenose College, Oxford, giving more attention to independent scientific studies than to the classics. He acquired a thorough acquaintance with the pharmacopœia, and after succeeding to the paternal estates in 1834 he experimented with the culture and studied the properties of the poppy, hemlock, henbane, belladonna, and other plants the therapeutic action of which was engaging the attention of the medical world. The agricultural crisis caused by the decline of the price of wheat in spite of protection to 39s. a quarter in 1835 roused his interest in this staple and suggested investigations and experiments in agriculture for the public good. He took the home farm of 250 acres for his researches in debated questions and unsolved problems of agriculture. From 1837 till 1839 he tested the effects of different kinds of manure on plants growing in pots, and was the first one to discover the value of the process of treating phosphates with sulphuric acid. He obtained remarkable results from the

application of this fertilizer to turnips, continued the experiment in the open field for two years longer, and in 1842 took out a patent for treating mineral phosphates with sulphuric acid and became the pioneer manufacturer of commercial fertilizers. He associated with himself in 1843 Dr. J. Henry Gilbert, who was fresh from his studies in agricultural chemistry under Liebig, and together they started the Rothamsted agricultural experiment station, the earliest of all with the exception of Boussingault's station at Bechelbronn in Alsace, antedating by nine years the German station at Möckern, and by the length of a human generation the station at Middletown, Conn. Their experiments covered the field of stock breeding and the feeding of animals as well as farm crops. In relation to the latter their favorite method of investigation was to sow the chief rotation crops, such as wheat, barley, oats, beans, clover, turnips, or potatoes, each through a long succession of years on the same piece of ground, a crop of each one on one plot year after year with no manure at all, on another plot with barnyard manure, on other plots with all the different varieties of manufactured manures. They studied also different courses of rotation without manure and with the various kinds of manure. On one field wheat has been grown every year for over fifty years without any manure, and given an average yield of between 13 and 14 bushels an acre. Experiments in manuring mixed perennial grasses have yielded valuable practical results, especially by showing how greatly meadows are affected by the weather. The benefits of nitrogenous manures to cereal crops, of potash to leguminous plants, and of phosphates to roots were first demonstrated at Rothamsted. The relative merits of sulphate of ammonia and of nitrate of soda as a source of nitrogen, the composition of rain and of drainage waters, the utilization of sewage, and the making of silos were other lines of inquiry. In 1861 a memoir on the sources of nitrogen for the nutrition of plants was published which marks an epoch in the development of physiological botany, proving that plants do not in general assimilate free nitrogen, though in a paper issued in 1891 it was admitted that leguminous crops do absorb in their growth considerable quantities of uncombined nitrogen, Lawes having revised to this extent the opinions that he had reaffirmed ten years previously in his treatise on Fertility, which laid down the principle that the store of nitrogen contained in the soil or supplied by manures is the source of practically all the nitrogen found in vegetation. The experiments on animals were conducted by watching the increment of live weight in cattle, sheep, and hogs obtained in a given time by feeding different quantities, kinds, and combinations of food; also the relative growth and development of different parts and organs of the animals; the relations of age and other conditions to the fattening of animals; the composition of the manure in relation to the food consumed; and the influence of different kinds and quantities of food on the yield and composition of milk. The source of fat in the food and of muscular energy, and the comparative values of animal and vegetable foods for human beings, were studied incidentally. The results of the Rothamsted experiments were published in the *Journal of the Royal Agricultural Society* from 1847 onward, and in serial publications and in about 130 special memoirs, notable among which are a paper printed in 1847 dealing with turnip culture, one on the amount of water given off by plants that was published in 1850, papers issued in 1851 and 1855 treating of

the fattening qualities of different breeds of sheep, one in 1858 on the composition and quality of various fattened animals, one in 1866 on feeding stock with malted and unmalted barley, one in 1875 on the valuation of unexhausted manures, one in 1878 on nitrification, one in 1879 on higher farming as a remedy for lower prices, one in 1879 giving the results of twenty years of experimentation on the mixed herbage of permanent meadow, one in 1880 on the English climate in relation to wheat crops, one in 1881 on the composition of rain and drainage waters, one in 1882 on nitrogen in soils, one in 1887 on the growth for many years in succession of root crops on the same soil, one in 1888 on the growth of potatoes for twelve years on the same land, one in 1889 on growing leguminous crops in succession, one in 1890 on the food of agricultural crops, one in 1891 on the sources of the nitrogen of leguminous crops, one in 1892 on allotments and small holdings, one in 1893 on home produce, imports, consumption, and price of wheat over forty harvest years, one in 1894 on crop rotation, one in 1895 on the feeding of animals for the production of meat, milk, and manure and for the exercise of force, one in 1896 on the depression in the price of grain and the production of wheat, one in 1897 giving new tables of the value of unexhausted manures and dealing with the question of compensation, one in 1898 on the valuation of manures obtained from food given for milk production, and a later one treating of the growth of the sugar beet and the manufacture of sugar in the United Kingdom. Sir John Lawes, who was created a baronet in 1882, made yearly an estimate of the wheat crop of Great Britain and Ireland. He was a member of the Royal Agricultural Society from 1846, and was active in establishing its experimental farm at Woburn in 1876. The laboratory in which most of the chemical work connected with the experiments at Rothamsted was conducted was itself built and equipped by means of a subscription raised among British agriculturists in 1854, and intended as a testimonial to Mr. Lawes in recognition of the national importance of the work he was carrying out. In the same year he was elected a fellow of the Royal Society, and in 1867 he and Sir Henry Gilbert jointly received the royal medal. In order that the work at Rothamsted might go on after his death, and that the continuous experiments conducted from the beginning without a break might still be persevered with, Sir John Lawes in 1889 set apart by a trust deed the sum of £100,000, with the laboratory and certain areas of land, for the prosecution of the investigations in perpetuity.

Leathes, Stanley, an English clergyman, born in Ellesborough, England, March 21, 1830; died in Much Hadham, Hertfordshire, April 30, 1900. He was educated at Cambridge, and took orders in 1856. He was curate of St. Martin's, Salisbury, 1856-58; rector of St. Philip's, Regent Street, London, 1869-70; of Cliffe-at-Hoe, 1880-89; and of Much Hadham from 1889 until his death. He held the chair of Hebrew at King's College, London, from 1863, and was a prebend of St. Paul's from 1870. His published works include *The Birthday of Christ* (London, 1866); *A Short Practical Hebrew Grammar* (1868); *The Witness of the Old Testament to Christ* (1868); *The Witness of St. Paul to Christ* (1869); *The Witness of St. John to Christ* (1870); *Truth and Life* (1872); *The Structure of the Old Testament* (1873); *The Cities Visited by St. Paul* (1873); *The Gospel its own Witness* (1874); *The Religion of the Christ* (1874); *The Grounds of Christian Hope* (1877); *The Christian's Creed*

(1877); Old Testament Prophecy: Its Witness as a Record of Divine Foreknowledge (1880); The Foundations of Morality (1882); Characteristics of Christianity (1883); Christ and the Bible (1885); and The Law in the Prophets (1891). Prebendary Leathes was a very thorough but extremely conservative scholar, and had little sympathy with the modern school of higher criticism.

Léonce (Nicole), Édouard Théodore, a French actor, born in Paris, in 1820; died in Raincy, Feb. 20, 1900. He was educated at the École de Droit in Paris. He first appeared as a singer at Belleville, whence he went to the Théâtre Vaudeville, Paris, and eventually to the Bouffes, then under the management of Offenbach. He was a very popular figure in all the original productions of that composer's operas, and was especially notable in *Orphée aux Enfers*. Other creations in which he became a favorite were *Croquefer* and *M. Choufleuri* in *Deux Aveugles*. At the Théâtre des Variétés he was the original player of Menelas in *La Belle Hélène*, of the rôle of the banker in *Les Brigands*, of Pepitt in *Trente Millions de Gladiateur*, and Lorient in *Mam'zelle Nitouche*. In 1888 Léonce retired, and was soon forgotten by the world he had so long amused.

Liebknecht, Wilhelm, a German politician, born in Giessen in 1826; died in Charlottenburg, Aug. 7, 1900. He was educated in the universities of Giessen, Bonn, and Marburg, studying deep into philosophy, plunged into journalism when he went out into the world, and made a name as a strong political controversialist. The revolutionary movement of 1848 drew him into its vortex, and in the insurrection in Baden he took a lively part. On its failure he fled into Switzerland, and from there to England, where he lived for twelve years, consorting with the revolutionists from all parts of Europe who sought asylum in that country from the reaction prevailing all over the Continent. The general amnesty of 1862 allowed him to return to Germany. His mind seethed with the labor question. He had become a thorough Marxist, and was determined to make the organization of the proletariat the aim of his life, convinced that the political solidarity of the working classes, facilitated by the formation of trade unions, could alone bring about the economic emancipation of the laborer. He entered into the socialist propaganda with a stern energy, a fanatic zeal, a dauntless and uncompromising spirit, that soon made him a leader. He became an editorial writer after his arrival in Berlin on the *Norddeutsche Allgemeine Zeitung*, an Opposition journal then, which was later purchased by Bismarck and turned into an official organ. The repression of the labor troubles of 1865 involved Liebknecht among the earliest victims. Expelled from Prussia, he became editor of the *Mitteldeutsche Volkzeitung* in Leipzig, which was soon suppressed. Though dogged by the political police, he preached socialism in all the towns of Germany and taught the workmen to form themselves into groups. He even essayed a propagandist tour in Prussia, and was arrested and condemned to three months' imprisonment. By this time the Social-Democratic party that he had organized, disciplined, inspired with a devotion to the Marxist ideal approaching religious zeal, and instructed in a method of incessant missionary effort for the recruitment of the party, began to be a power in the land. In 1867 a Saxon constituency elected him to the North German Reichstag. He created at this time an organ for the German Socialist party, the *Demokratisches Wochenblatt*. In the Reichstag Liebknecht boldly assailed the foreign and military policy of Bismarck. He op-

posed the war against France, and later the proclamation of the empire and the annexation of Alsace-Lorraine. At the risk of compromising the future of his young party he steered a course directly counter to the enthusiastic sentiment of the nation, declaring that socialism must necessarily be international and antimilitary. Bismarck stigmatized this attitude of the Social-Democrats as unpatriotic and detestable, and on March 26, 1872, the two Socialist leaders, Liebknecht and Bebel, were condemned to two years' imprisonment on a charge of high treason. They were confined in the fortress of Hubertusburg. When he was free again Liebknecht was elected in 1875 to the Reichstag in spite of prodigious efforts that the Government made to hinder his election. Bismarck tried to keep him out of the Reichstag, nevertheless, by having the Reichstag pronounce the election invalid. Liebknecht then in a series of violent articles demonstrated the official interference in the election, and charged the Government with violating the mails by opening his letters. This accusation created a scandal that excited all Germany and led to an investigation which led to no conclusion. He was re-elected to the Reichstag by the workmen of Mayence in 1881, and took the parliamentary leadership among the small group of Socialists, the champion of the party who bearded the Iron Chancellor who denounced and oppressed. The audacious affronts that he flung at the all-powerful Reichskanzler in his supreme hour of greatness, for which he was often disciplined by the Reichstag, the unbecoming anger to which he stirred Prince Bismarck, and the far more unbecoming petty tricks and abuses of power that he showed up as inherent in Bismarckian political methods, the debasement of the police, the prostitution of the press, the coercion of voters by officials, the telling blows that Liebknecht dealt Bismarck in relation to his own conduct, as well as the constant attacks on the imperial policies, excited the interest of everybody, the admiration of the Socialists, and the sympathetic delight of the South Germans, who dreaded the overweening influence of Prussia. The Conservative journals characterized Liebknecht himself as a Prussian hater, and did not fail to hold up to general odium the internationalist principles that he had engrafted on the programme of the German Socialist party. He was the principal leader and organizer, almost the dictator, of the party in the country, under whose stern discipline it waxed in spite of repressive laws and police persecution. Before Bismarck passed off the scene the policy of proscription was found to be useless. The Socialist party became co-extensive with the industrial working population of Germany, and forced Bismarck to offer accident, invalid, and old-age insurance, the most daring innovation in economic legislation yet attempted in any country. Other measures for the protection and benefit of labor were extracted from the Government, and were treated by Liebknecht and his comrades, not with jealous mistrust nor with boasting triumph, but with malicious complacency, with benevolent neutrality. They had brought the anti-Socialist Government to its knees, drawn it into inaugurating Socialistic legislation on its own responsibility, without entangling themselves with any conditions or pledges and less danger than ever of losing their following. If the authors of the Socialistic legislation, which was at bottom inspired from the same source as that from which the Social-Democrats drew their doctrines, the teachings of the great German philosophers, were disappointed in the hope of weakening the Socialistic party, but rather added to its strength and importance, the

party itself underwent a change. It became temperate and more considerate of interests dominating the practical conditions of politics in proportion as the Government became mild and conciliatory. Liebknecht himself no longer laid stress on internationalism as an element in German politics, and some of the Socialist leaders were willing to accept the Prussian military system as temporarily necessary in Germany. They showed themselves sometimes more in accord with current patriotic and imperialistic sentiments than the Radicals, whom the Socialists now overshadowed. In many questions of foreign and domestic policy the Socialists took similar grounds with the Radicals, and Liebknecht advised forming electoral alliances with the Radicals to help them with votes in districts where Socialist candidates had no chance in return for Radical support in districts where Socialists were numerous. Thus it came that Liebknecht, the staunch upholder of pure Socialist theories, was accused of parliamentary opportunism, of compromising the cause by co-operating with the bourgeois parties. A proposal was even made at the Socialist Congress to expel him from the party. Later other leaders of the party were inclined to go farther than he approved in the direction of moderation and compromise. He took a prominent part always in the international congresses of Socialists and in trade-union congresses, and his influence was felt, his authority acknowledged, by the labor parties of all countries. He retained his seat in the Reichstag until his death. After the expiration of the anti-Socialist law of Prussia in 1890 he resided in Berlin and edited *Vorwärts*, the central organ of the German Social-Democrats.

Loch, Henry, Baron, a British colonial administrator, born May 23, 1827; died in London, June 20, 1900. He went into the British navy as a midshipman at the age of fifteen, left it when two years older to join the Bengal cavalry, took part in the Sutlej campaign, became aid-de-camp to Lord Gough, and saw considerable service in India. In 1854 he did special service in Bulgaria in the organization of the Turkish troops for the Crimean War, crossed with the army from Varna to the Crimea, and served through the campaign. In 1856 he went to China with the military expedition sent out after the Arrow incident to enforce the demand for reparation for the insult to the British flag. He remained in China, explored the Peiho river, and when Lord Elgin became minister to China a second time in 1860 accompanied him as private secretary. In association with Harry Parkes he negotiated the surrender of Pehatang and the Taku forts to the Anglo-French expedition. In negotiating for the admission of the embassies to Peking they were seized and thrown into prison. Peace was not made by the British until the prisoners were released and the summer palace was burned in retaliation for the treachery of the Chinese. Loch returned to England with the convention of Peking and the ratifications of the treaty of Tientsin. He became secretary to Sir George Grey in 1861, and from 1863 till 1881 was lieutenant governor of the Isle of Man, receiving the honor of knighthood in 1880. In 1882 he was appointed Commissioner of Woods, Forests, and Land Revenues. In 1884 he was appointed Governor of Victoria, where he remained till 1889, when he was transferred to Cape Colony to succeed Sir Hercules Robinson as Governor and High Commissioner. The Australian colony had never had a more popular and satisfactory governor than Sir Henry Loch, but in South Africa he pleased neither imperialists nor Afrikanders. He retired in 1895 and was created a peer.

Lumley, Ralph Robert, an English dramatist, born in London in 1865; died there, May 27, 1900. He was editor of the *Court Journal*, a place which his father and grandfather had held before him. He was a barrister of the Middle Temple, but never practiced. He wrote a comedietta called *Palmistry*, produced in London, April 13, 1888. His next work was a collaboration with Horace Ledger, called *The Deputy Registrar*, produced likewise in 1888. The success of this production brought him a commission from Mrs. John Wood, for whom he wrote *Aunt Jack*, produced by her with great success July 13, 1890. He then wrote *The Volcano*, produced March 14, 1891. Mr. Toole produced Mr. Lumley's three-act farce, *The Best Man*, March 6, 1894, and *Thoroughbred*, Feb. 13, 1895. His last production was *Belle Belair*, a drama in four acts, with Mrs. John Wood in the leading rôle, May 19, 1897.

McIlwraith, Sir Thomas, an Australian statesman, born in Ayrshire in 1835; died in London, July 17, 1900. He was educated at Glasgow University, went to Victoria at the age of nineteen, and was employed as an engineer in the construction of the Government railroads. He became interested in land in Queensland in 1861, settled in that colony in 1870, after having been elected to represent Maranoa in the Legislative Assembly, joined the Macalister Cabinet as Minister of Public Works and Mines in January, 1874, resigning in the following October, was elected for Mulgrave in 1878, and when the Douglas ministry was defeated in January, 1879, he became Premier and Colonial Treasurer, his administration lasting till November, 1883. His annexation of New Guinea on April 4, 1883, was not approved by Lord Derby, then Colonial Minister in England, whose veto led to the intercolonial convention held in Sydney in November of that year, which formulated the basis on which the Federal Council of Australia was afterward established. He retired from politics in 1886, but returned in 1888, when he was elected for North Brisbane by a large majority over the Premier, Sir Samuel Griffith. When Parliament met he became Premier. He engaged in a dispute with the Governor, Sir Antony Musgrave, over the power of pardon, which the Governor considered a part of the royal prerogative, but which Sir Thomas McIlwraith, whose view was sustained by the Colonial Office, contended could not be constitutionally exercised except on advice of the ministers. On the death of Sir Antony Musgrave, in 1888, the Queensland Premier claimed that his Government ought to be consulted regarding the choice of a successor, but this the Imperial Government, in which Lord Knutsford was Secretary for the Colonies, would not concede. When Sir Henry Blake was appointed, Sir Thomas McIlwraith protested, and a deadlock ensued which was only broken by the voluntary retirement of Sir Henry Blake. In November, 1888, Sir Thomas McIlwraith resigned the premiership on the ground of ill health. In 1890 he joined with Sir Samuel Griffith in overturning the Government, and became Treasurer in the Cabinet formed by the latter. In 1892 he headed an administration himself, and in 1893 he finally retired from public life.

McLeay, Franklin, an English actor, born in Watford, Canada, June 28, 1867; died in London, England, July 6, 1900. He was educated at Toronto University, and for three years was associated with James E. Murdoch in the latter's School of Oratory, Boston, as a lecturer on the Shakespearean drama. In 1894 he attracted the attention of Wilson Barrett and accepted a place in that actor's company. His first appearance at the Shakespeare Theater, Liverpool, in the autumn

of that year, was in a small part in Claudian. He was a member of Mr. Barrett's company four years, during which he was steadily promoted. His most important parts were the tetrarch in Claudian, the bishop in Ben-ma-Chree, the ghost in Hamlet, Nero in The Sign of the Cross, Jediah in Daughters of Babylon, and Dentatus in Virginius. In Mr. Barrett's revival of Othello, in London, May 22, 1897, he played Iago with much success. Early in 1898 he joined Mr. Beerbohm Tree's company for the revival of Julius Cæsar, in which he played Cassius, Jan. 22. In Ragged Robin, produced by Mr. Tree, June 23, 1898, he was Farmer Stokes; Cardinal Richelieu in The Musketeers, Nov. 3, 1898; and Quince in A Midsummer-Night's Dream, Jan. 10, 1900. His last appearance was made June 21, 1900, in the part of Derrick in Tree's revival of Rip Van Winkle. He married, Dec. 18, 1898, Grace, daughter of the actor Charles Warner.

Marchand, Gabriel, a Canadian statesman, born in St. John's, Jan. 9, 1832; died in Quebec, Sept. 25, 1900. He was educated in the St. Hyacinthe College, settled as a notary in his native place, was elected to the first Legislative Assembly of Quebec in 1867, and represented his town in that body continuously till his death. He was Provincial Secretary and later Commissioner for Crown Lands in H. G. Joly's Liberal Cabinet of 1878. When the Liberals were in power from 1887 to 1892 under the Mercier Cabinet he served as Speaker of the House of Assembly. After the return of the Conservatives he took the place of Mercier as leader of the Opposition, and in 1897, when the Liberals triumphed at the polls, he became Premier of Quebec with the portfolio of Colonial Treasurer, and died in office. He was an active organizer of the volunteers among the French Canadians during the Fenian excitement, and commanded a brigade in 1870 when the Fenians invaded the province. He was also a newspaper writer and editor and a dramatist, author of four comedies.

Martineau, James, an English theologian and philosopher, born in Norwich, England, April 21, 1805; died in London, Jan. 11, 1900. He was of Huguenot descent. His father was a camlet manufacturer and wine merchant of Norwich. The son was sent to Dr. Lant Carpenter's school at Bristol, and at eighteen entered Manchester New College, then at York. He was ordained in 1828 as junior pastor of the Presbyterian (more properly Unitarian) Chapel, in Eustace Street, Dublin. His unwillingness to accept the *regium donum*, or annual allowance made to the Irish Presbyterian churches by the Crown, caused him to resign this charge and accept a call to Paradise Street Chapel, Liverpool, in 1832. Here he remained till 1857, and his congregation erected a new chapel for him in Hope Street in 1848. At this period he became known, both as writer and preacher, far beyond the limits of the Unitarian body, and after his removal to London in 1857 to become at first the colleague of his friend Taylor at the Little Portland Street Chapel, and from 1861 to 1872 sole minister, he was ranked among the foremost English preachers of his time. On his resignation in 1872 his congregation and his friends presented him with a purse of nearly £10,000. He was appointed Professor of Philosophy at Manchester New College in 1840, was principal of the college in 1869-'85, president in 1886-'87, and vice-president in 1888-1900. During the building of his chapel at Liverpool he spent many months in the study of philosophy at Berlin and Dresden, and how greatly he was influenced by this experience may be seen in his own words, in which the

change in his thought is described "as a new intellectual birth." A marked characteristic of his long career was his steady growth. Says one writer of him in this connection: "His early works are good; incomparably better are his latest, and the best are the monuments of patient work constructed at an age when the most active-minded become weary and long for repose." As an acute thinker he is perhaps seen at his best in his Study of Religion, which contains a searching examination of agnosticism and elaborate study of the doctrine of causality. As a reviewer he wrote with vigor and even severity on occasion, and in the discussion of speculative theories displayed small patience with verbal evasions of familiar difficulties. Until the age of ninety it was his custom to rise at six o'clock and work several hours at his desk till the midday luncheon, resuming labor after dinner, and continuing to write or study till midnight. Long before his death he had come to be ranked as the foremost philosophical thinker in Great Britain, and the passage of each year deepened the reverence with which he was regarded. In certain respects he resembled his distinguished sister Harriet, but they were far apart in their convictions, and it is doubtful if she ever comprehended the serenity of his thought. He was a voluminous writer, but he published only a comparatively small part of what he composed, his habit being to subject all that he wrote to the severest condensation. Besides editing several collections of devotional literature, he published Rationale of Religious Inquiry (1836); Endeavors after the Christian Life (1843-'47); Unitarianism Defended, with J. N. Thom and H. Giles (1839); Miscellanies (1852); Studies of Christianity (1858); Essays: Philosophical (first series, 1866; second series, 1868); A Word for Scientific Theology (1868); New Affinities of Faith (1869); Why Dissent? an address (1869); The Place of Mind in Nature, a lecture (1872); Hymns of Praise and Prayer (1874); Religion as Affected by Modern Materialism (1874); Modern Materialism: Its Attitude toward Theology (1876); Hours of Thought on Sacred Things (1876-'80); Ideal Substitutes for God, a lecture (1878); Loss and Gain in Recent Theology (1881); The Relation between Ethics and Religion (1881); A Study of Spinoza (1882); Types of Ethical Theory (1885); A Study of Religion: Its Sources and Contents (1888); The Seat of Authority in Religion (1890); Essays, Reviews, and Addresses (1890-'91). "To Dr. Martineau's Huguenot ancestry," says one writer, "may perhaps be traced some of the sterner sides of his character—his independence, his ready sacrifice of all and everything for the truth's sake, his rapierlike thrusts in argument. But the influence exercised by him over the minds and hearts of men, women, children, flowed from his own individuality. . . . The test of a public speaker's utterances lies in the effect they produce when read, and here Dr. Martineau never failed. The printed word has all the charm of the spoken one."

Martinez de Campos, Arsenio, a Spanish soldier, born Dec. 14, 1834, in Segovia; died in Zarauz, Sept. 23, 1900. He was the son of a general and was educated for the army in the Staff College at Madrid, taking a high stand in his studies and leaving in 1852 with the rank of lieutenant. He served as aid-de-camp to Gen. O'Donnell in the campaign in Morocco in 1859, winning a medal by his bravery. In 1864 he was sent to Cuba at his own request, and in the pursuit of the insurgents he distinguished himself by his fearless and tireless devotion to duty, never sleeping twice under the same roof during nine months. His services brought him promotion to

the grade of brigadier, and on his return to Spain in 1870 he led a command with equal activity and skill against the Carlist insurgents. He accepted Don Amadeo, the Italian King, although he had always been identified with the Conservatives. When Amadeo was forced to abdicate, and the federal republic was set up, Martinez de Campos made himself so conspicuous by his open and contemptuous hostility to the new order that he was not only deprived of his command, but imprisoned in a fortress. When the garrison of Madrid under Pavia's command overthrew the federal republic Martinez de Campos requested permission to serve against the Carlists in any capacity, and the Government of Serrano released him and made him military governor of Gerona with the rank of general of division. He fought against the Carlist bands until the Salmeron ministry appointed him captain general of Valencia. The city declared itself a canton, and he bombarded it and entered with his troops on the fifth day; advanced soon afterward on Cartagena, but returned to Valencia to suppress a Carlist rising, and when that was accomplished marched to the relief of the garrison of Alicante, to prevent a cantonal government being established there; opposed with energy the proposal of the local authorities to invoke English interference, and when the republican Government in Madrid assented to such a step he sent in his resignation, which was accepted. After this he scarcely concealed his Alfonsist principles, and tried to persuade Gen. Concha, to whom Marshal Serrano had resigned the command of the army, to proclaim the King. Concha hesitated and Canovas del Castillo thought the time not yet ripe. Martinez de Campos commanded a division under the Marquis del Duero, and fought the sanguinary battles of Muñecas and Galdanes, extricating himself with difficulty on the day on which Gen. Concha fell at Estella, and afterward covering the retreat to Tafalla. His royalist sympathies were so well known that Serrano recalled him in spite of his services against the Carlists, and again placed him on the retired list. The Minister of War vouched for his fidelity, but his intrigues could not be long concealed, and imprisonment would have been his lot if he had not forestalled the action of the Government by hurrying to Murviedo, where his cousin, Luis Daban, had a command, and with these troops issuing a *pronunciamiento* for King Alfonso XII on Dec. 29, 1874. The Serrano Government at once gave way to the monarchy, and the general who had brought about the restoration was naturally selected for the most important command, that of captain general of Catalonia, where he had full direction of the operations against the Carlists. As soon as the army was sufficiently organized and trained to take the offensive against the Carlist forces he advanced in the spring of 1876, and by a series of flanking movements drove the Carlist army out of Arragon, Navarre, and Biscaya over the French border, and thus ended the civil war. For this service he was made a field marshal, and by his own desire was sent to put down the revolution in Cuba. He was entrusted with complete discretionary powers, and he brought about the peace of Zanjon more by promising to secure for the Cubans the removal of their main grievances than by his operations in the field. The Government at home refused to carry out the reforms for which he had pledged his word, and consequently he resigned the post of Captain General of Cuba, and returned to Spain in 1879. Canovas del Castillo, who was then Prime Minister, gave up his post to Martinez de

Campos rather than let him communicate his indignation to the army. He did not long remain at the head of affairs, nor did he accomplish the objects he had in view, and the experiment seems to have opened his eyes to the difficulties that beset Spanish statesmen and determined him to remain a soldier to whose political views the chiefs of both political parties paid the greatest deference because he alone could control the army. He controlled the King and afterward the Queen-Regent and all the political powers, and could make Canovas or Sagasta Premier whenever he was displeased with the action of the party in office. To bring about his Cuban reforms he accepted the post of Minister of War in the Sagasta Government of 1881, with no greater success than before, and thereafter he never held a Cabinet office. In September, 1893, an anarchist threw a bomb that slightly wounded him while he was reviewing his troops at Barcelona. In the same year he took command in Morocco when the Moors attacked Melilla. In this campaign he was not successful, but the Government would not venture to recall him, and he negotiated the terms of peace with the Sultan in 1894. In 1895 he was made captain general of New Castile in order that he might deal with the military riots in Madrid, and when a fresh revolution was started in Cuba the task of dealing with it was given to him. Here he met the same difficulties as before. His troops would not undergo the privations and dangers necessary to deal with the elusive tactics of Gomez and Maceo, and yet the Spanish Cortes could not be induced to grant self-government to Cuba and by so doing deprive Spanish trade of a monopoly and Spanish politicians of fat offices. His conciliatory measures and promises of reform could have no effect, because the Spanish Government had broken faith before, and when he tried offensive tactics neither he nor his men had the heart for the work. When his army was practically shut up in Havana at the end of a year's fighting he was recalled, and Gen. Weyler was sent out to prosecute the war with more energy. In Madrid he defended his policy of conciliation from his seat in the Senate, and declared that if the Government would let him carry it out in good faith he would make it successful. In the early part of 1899 he was elected president of the Senate, holding that office to the end. He played a singular rôle in Spanish politics, influencing and sometimes deciding the policy of each party in turn, liked quite as well by his political opponents as by his own party, and popular among all classes of Spaniards. He made both of the constitutional parties in Spain after first setting the present dynasty on the throne, but could get neither party to carry out his views. Almost at any moment he could have had the premiership from either party or from a new fusion party of his own creation, but when he was Premier his subordinate ministers circumvented him, and at all times the subtle politicians frustrated the policy he sought to impose, whether in domestic or in colonial affairs.

Max Müller, Friedrich, a German Orientalist, born in Dessau, Germany, Dec. 6, 1823; died in Oxford, England, Oct. 28, 1900. He was the son of Wilhelm Müller, the German poet, but in 1850 took one of his Christian names as a part of his surname. His godfather was Von Weber, the composer, and he was at first destined to become a musician, but Mendelssohn advised him to "keep to Greek and Latin." He was educated at the Universities of Berlin and Leipzig, and in 1844 translated the *Hitopadesa* into German. During a visit to Paris the next year what proved to be

his life work was happily suggested to him—an edition of the Rig-Veda with a commentary. Intending to study and examine manuscripts in the Bodleian Library and East India Company's house, he went to England in 1846, and two years afterward took up his residence in Oxford. After holding several posts of honor in the university,



he was appointed Professor of Comparative Philology in 1868, resigning in 1875. As a lecturer he was very successful. He possessed a clear and at times even brilliant style, and the duller theme became of interest when handled by him. His scholarship, however, was not of a progressive type, and the adverse criticisms that have been made regarding various conclusions of his

by contemporary philologists in Germany and America are no doubt due to this circumstance, while specialists in general were disposed to consider that he overestimated the influence of language. His more important writings include *The Hitopadesa*, a collection of Indian fables (Leipsic, 1844); *Meghadūta*, an Indian Elegy (trans.) (Königsberg, 1847); a translation of the Rig-Veda (Oxford, 1848-'74); *Essay on Bengali* (1847); *Essay on Indian Logic* (1853); *Proposals for a Uniform Missionary Alphabet* (1854); *Letter to Chevalier Bunsen on the Classification of the Turanian Languages* (1854); *The Survey of Languages* (1855); *The Hymns of the Rig-Veda in German and translation of the Prātisākhya* (1857); *Buddhism and Buddhist Pilgrims* (1857); *The German Classics from the Fourth to the Nineteenth Centuries* (1858); *Essay on Comparative Mythology* (1858); *History of Ancient Sanskrit Literature* (1859); *Lectures on the Science of Language* (1861-'64; revised 1891); *A Sanskrit Grammar for Beginners* (1866); *Chips from a German Workshop*, a collection of essays (1867-'75); *On the Stratification of Languages* (1868); *Rig-Veda Hymns to the Maruts or Storm Gods* (trans.) (1869); *Introduction to the Science of Religion* (1878); *Two Texts of the Rig-Veda* (1873); *The Origin and Growth of Religion* (1878); *The Upanishads* (trans.) (1879-'84); *Selected Essays on Languages, Mythology, and Religion* (1884); a translation of Kant's *Critique of Pure Reason* (1882); *India: What can it Teach Us?* (1883); *Biographical Essays* (1884); *The Science of Thought* (1887); *The Dhammapada and the Sutta Nipāta* (trans.) (1881); *The Laws of Manu* (trans.) (1887); *The Vedic Ceremonies, Part I* (1887); *Biographies of Words and the Home of the Aryas* (1888); *Natural Religion* (1889); *Physical Religion* (1891); *Anthropological Religion* (1892); *Theosophy, or Psychological Religion* (1893); *Three Lectures on the Vedānta Philosophy* (1894); *Contributions to the Science of Mythology* (1897); *Rāmākrishna: His Life and Sayings* (1898); *Auld Lang Syne* (1898-'99); *The Six Systems of India's Philosophy* (1899). At the time of his resignation of his Oxford professorship he was intending to return to Germany; but the university requested him to remain at Oxford and undertake the editorship of

a series of translations of the Sacred Books of the East, at the same time appointing a deputy professor. In 1888 and in 1891 he was appointed Gifford lecturer on natural religion at Glasgow University.

Mazzella, Camillo, an Italian prelate, born in Vitulano, Feb. 10, 1833; died in Rome, March 26, 1900. He was a member of the Society of Jesus and its chief representative in the Sacred College, having been created a cardinal on June 7, 1886, and consecrated as Bishop of Palestrina on April 19, 1897. On all theological questions he was the trusted adviser of Pope Leo XIII.

Momerie, Alfred Williams, an English clergyman, born in London, March 22, 1848; died there Dec. 6, 1900. He was the son of a Congregational minister, and after being educated for that ministry at the University of Edinburgh, went to Cambridge. In 1879 he was ordained deacon in the Established Church, and priest in 1879. He was appointed Professor of Logic and Metaphysics at King's College, London, and in 1883 was elected to the morning preaching at the Foundling Hospital. He was an extreme Broad Churchman, and as his liberal views created dissatisfaction in the governing boards of the two institutions with which he was connected, his relations with them terminated in 1891. He possessed a brilliant style, and his preaching attracted large numbers to hear him. His published works, which had a wide circulation, include *Personality* (1879); *The Origin of Evil and Other Sermons* (1879); *The Basis of Religion* (1883); *Defects of Modern Christianity and Other Sermons* (1883); *Agnosticism* (1884); *The Corruption of the Church; The English Church and the Romish Schism; Belief in God* (1886); *Preaching and Hearing* (1886); *Inspiration and Other Sermons* (1889); *Church and Creed* (1890); *The Religion of the Future and Other Essays* (1898).

Morris, Felix, an English actor, born in London, April 25, 1850; died in New York city, Jan. 13, 1900. He was the son of an English sea captain, and was educated in Switzerland. He studied medicine and was graduated in 1871, but resolved to become an actor, and removed to the United States. His first appearance was in Albany, N. Y., a few weeks after his arrival, and while engaged in the business office of the Division Street Theater. He was so affected by stage fright that his desire to act was smothered for several months, during which he was a drug clerk in Boston, a laborer in a foundry, and for a short time a sailor. Finally he obtained, in 1872, a place in the Capitol Theater, Albany, as captain of the supernumeraries, and spoke his first lines Aug. 19, 1872, in *A Heart of Gold*. Here he remained, playing unimportant parts, until 1875, when he went to Canada with a company playing Boucicault's *Shaughraun*. The only beneficial result of this tour was an engagement for the season of 1876-'77 at the Academy of Music, Montreal, where Morris quickly won great popularity as a representative of comedy and character parts. He was especially successful in *Touchstone*, with Miss Adelaide Neilson. In 1877, in association with Neil Warner, he assumed the management of the Academy of Music, Montreal, but was bankrupted at the end of the year, and went to New York, where he secured an engagement at the Fifth Avenue Theater. During this engagement he played comedy rôles with Mary Anderson and Madame Modjeska, and became associated with James Lewis. The summer of 1878 he spent in a very successful engagement in Halifax, Nova Scotia, where he first met the lady who subsequently became his wife, Miss Florence

Wood, an actress of Mr. Augustin Daly's original New York company. In the autumn of 1878 Morris went to San Francisco under engagement as comedian of the California Theater, where he scored an enthusiastic success as the Pasha in the first American presentation of the comic opera *Fatinitza*, and thenceforward was a favorite. He remained here until 1880, playing the leading comedy parts with Barrett, Boucicault, Lester Wallack, John T. Raymond, Robson and Crane, the Florences, John McCullough, and the usual routine of stock work. On May 15, 1879, he married Miss Wood. The "Old California" company, as it is affectionately called by its friends, was disbanded forever in 1880, and Morris sought engagement in the East. He was for a time in Lester Wallack's company, and for a longer time endured much ill fortune in various short engagements, including a disastrous trip through the West Indies. During this period he made a very great success as the English correspondent in the first production of Michael Strogoff at Booth's Theater, New York, and was finally engaged as a member of the Union Square company. He then adapted the story of Young Mrs. Geoffrey for Miss Helen Dauvray, under the name *Mona*. The only useful result of this work was that the production of the play first introduced E. H. Sothern to favorable notice. In the summer of 1885 Mr. and Mrs. Morris went to London, but soon became homesick for America and secured passage to return. While waiting for the departure day, Morris was offered and accepted the part of the professor in a version of *Ultimo* called *On 'Change*, which was to be produced for a single morning performance two days before the sailing of his steamer. He played the part with an inimitable Scotch dialect, and, to the astonishment of himself, the author, and all London, the play was so great a success and his own impersonation so captivating, that Morris and the Scotch professor became from that day institutions of the British stage. This production occurred at Toole's Theater in August, and the play ran without interruption for three hundred and sixty performances. While enjoying this success, Morris first entered into the business connection with Miss Rosina Vokes, during the long continuation of which these players delighted thousands in England and America with their performances in such plays as *The Game of Cards*, *The Old Musician*, and *A Pantomime Rehearsal*. After Miss Vokes's death he became a member of the Lyceum Stock Company of New York, under the management of Daniel Frohman, and with these players made his last appearance, except in vaudeville, as Walter Hinzelman in *At the White Horse Tavern* at Wallack's Theater, New York, in February, 1899. He had been for several seasons a great favorite in short performances in the vaudeville theaters throughout the country, and found this kind of work more profitable than a regular stock engagement. His last appearance was at Brooklyn, N. Y., Dec. 24, 1899, in a little sketch called *Behind the Scenes*, preceded by his beautiful personation of Kerry, in a scene from Boucicault's play of that name.

Mulhall, Michael George, an Irish statistician, born in Dublin, Ireland, in 1836; died in Killiney, Ireland, Dec. 12, 1900. His education was obtained at the Irish College in Rome. In 1861 he founded the *Buenos Ayres Standard*, the first English daily in South America. He was widely known as a statistician, and was a constant contributor to the *Contemporary Review*. In 1880 he estimated that the population of the United States in 1900 would amount

to 76,200,000, and the astonishing accuracy of his forecast was shown when the census of 1900 was reported as 76,295,000. He was the author of *Rio Grande do Sul and its German Colonies* (London, 1873); *Europe to Paraguay and Matto Grosso* (1877); *The Progress of the World in Arts, etc., since the Beginning of the Nineteenth Century* (1880); *The Balance Sheet of the World, 1870-'80* (1880); *A Dictionary of Statistics* (1883); *History of Prices since the Year 1850* (1885); *The Argentine Republic: A Handbook of the River Plate* (with E. T. Mulhall) (1869; 6th edition, 1886); *Fifty Years of National Progress, 1837-'87* (1887); *Industries and Wealth of Nations* (1896).

Munkacsy, Michael de, a Hungarian painter, born in Munkacs, Oct. 10, 1844; died in Bonn, Germany, May 1, 1900. His original name was Lieb and his early training was as a carpenter. His father, a petty official, and his mother having both died, he was bound out to a trade at the age of ten, and was treated so brutally by his master that he ran away. He was befriended by a portrait painter, and having learned his artistic gift, made his way to Pesth, where Ligeti, a landscape painter, gave him a few lessons, went on to Vienna, and thence, in 1865, to Munich, earning his living as best he could while studying in the academy, and gaining hope and inspiration as he acquired knowledge and facility, and finally reached Düsseldorf in 1868. The painters Baudier and Knaus interested themselves in him, and his work found recognition immediately. In 1870 he sent to the Paris Salon *Le Dernier Jour d'un Condamné*, which by its strong painting and dramatic power created a sensation. He had already been hailed as one of the brightest of the young painters of the Düsseldorf school, and the vigor and boldness of his style had a reflex influence upon the others. His first exhibit was so enthusiastically received in Paris that he went there to work, but for some years he kept up the Düsseldorf traditions, turning out *genre* paintings giving anecdotes based on types and episodes of his native country, but striking in execution and marked by individuality. The influence of French art showed itself first clearly in his *Intérieur d'Atelier*, containing his portrait and that of his wife. His *Milton Dictating Paradise Lost*, exhibited in 1878, won for him the admiration of the multitude and spread his fame to many lands. His *Christ before Pilate*, in 1881, made him the most popular painter of the day. The artists of Paris gave him a feast to compliment him on his triumph, and the speculator who bought his painting exhibited it in all the countries of Europe, brought it in 1889 to the Universal Exhibition, and finally sold it to John Wanamaker for \$100,000. *Christ on Calvary*, in 1884, renewed his triumph. Although artists find in him a lack of refinement and invention, and call his work shallow and theatrical, his use of blacks and bitumens vicious, still he is recognized as the strongest of the painters who have endeavored to interpret the Gospel story with modern taste and technique. He painted an *Ecce Homo* later. These works brought him wealth, enabling him to entertain magnificently in his Parisian mansion. Mozart Dying was the last of his historical paintings in oil. He painted small *genre* pictures of elegant life in bright tones, and some effective portraits. Afterward he devoted himself almost exclusively to decorative allegorical and historical compositions for the Vienna Museum and the hall of Parliament in Buda-Pesth, until his brain became diseased several years before his death.

Muravieff, Count Michael Nikolaievich, a Russian diplomatist, born April 19, 1845; died in St. Petersburg, June 21, 1900. He was the son of the Governor of Lithuania, and grandson of Count Michael Muravieff who stamped out with an iron heel the Polish insurrection of 1863. He studied for a short time in Heidelberg, and began his diplomatic career without further preparation in the Ministry of Foreign Affairs in St. Petersburg at the age of eighteen, soon afterward was attached to the legation at Stuttgart, where he won the good will of Queen Olga of Württemberg, who was a Russian princess, was transferred to Berlin, thence to Stockholm, thence back to Berlin as second secretary, and in 1877 in the same capacity to The Hague. In the Russo-Turkish War he took charge of an ambulance train that was furnished to the Red Cross Society by the Queen of Württemberg. As soon as the war ended he returned to the service, rising to be first secretary at Paris, counselor of the Berlin embassy, and minister to Denmark, where he was brought into contact with members of the imperial family, and won the good opinion of the Emperor Nicholas II, who was so impressed with his historical and diplomatic knowledge, judgment, and tact that when Prince Lobanof died and M. de Staal declined to take the post he was, on Jan. 13, 1897, appointed Minister of Foreign Affairs. Count Muravieff had the subtle art of impressing the great persons with whom he had to do with his ability as a diplomatist, and at the same time pleasing them with his *finesse* and social charm and the elegant superiority with which he sank his professional ability out of sight. His skill and knowledge in diplomacy was not known except to those to whom he had chosen to reveal himself until he became the Czar's Minister of Foreign Affairs, and then it was soon revealed to the whole world. Prince Lobanof had made no forward move in China, although he was preparing for a further assertion of Russian influence when the Siberian Railroad should be completed. Count Muravieff saw that the intrusion of Germany into the Chinese problem and the impatience of England necessitated prompt and dexterous action. The leasing of Port Arthur and Talienwan and the extension of the Siberian Railroad through Chinese territory to the sea and toward Peking came as a surprise to British diplomacy, and no counter-move could be invented. In the Cretan question he decided on an independent course which did not impair the influence of Russia, and did leave her hands free for all future contingencies. The arrangements for the Peace Conference at The Hague, which was an idea of the Czar's, were carried out with such skill and completeness that Russia gained in prestige and renown, turning the tables on the power that has always posed as the champion of freedom and progress, whereas if liberal sympathies everywhere had not been so thoroughly enlisted and other governments handled so gently it might have placed Russia in a ridiculous position. In the Chinese complications he preserved with admirable skill the independent position of Russia, and without breaking with the powers still preserved the attitude of friend and protector of China. In the Korean question also, and in Persian affairs, he understood how to strengthen materially the position and prestige of Russia without causing danger to peace or even friction. Count Muravieff died suddenly while working at his desk.

Murio-Celli, Adelina (Mme. Adelina Murio-Celli d'Elpeux), a German singer, born in Breslau in 1844; died in New York city, April 10, 1900.

She was taken by her parents to Paris in her infancy, and at the age of fifteen was graduated at the Conservatoire. She was engaged by Arditi, and under his management made many tours through Europe. She became the principal singer of the Italian opera company established in the city of Mexico by Maximilian, on whose death she went first to Havana, then to New York, where she remained as a popular member of the opera at the Academy of Music for several years. In 1870 she married M. Ravin d'Elpeux, French consul at Chicago, and retired from the stage to devote herself to musical instruction in that city. In 1880 she removed her school to New York. She was also a composer of great ability, and her songs have been favorites with Patti, Gerster, and Parepa-Rosa.

Newville, Juliette (Juliette Leale), a French actress, born in Paris in 1870; died there, July 26, 1900. She took the second prize at the Paris Conservatoire for comic opera, and soon thereafter, in January, 1890, made her first appearance as a page in Sarah Bernhardt's production of *Jeanne d'Arc*. In February of the same year she joined the company of the Folies-Dramatiques and originated the title rôle of *Ma Mie Rosette* with brilliant success. She was soon afterward engaged to play *Miss Helyett* in Brussels. She was seen then in that part by Charles Wyndham, who at once engaged her for the same part in the English adaptation called *Miss Decimo*. After a popular run of that piece she was engaged for the Gaiety Theater, London, and came to the United States as the first singer of *The Gaiety Girl*, in which she made her first appearance as *Mina* at Daly's Theater, New York, Sept. 18, 1894. She came again in 1897, and played *Juliette Belleville* in *In Town* at the Knickerbocker Theater, Sept. 6. Her last appearance in London was as *Suzette* in *The Elixir of Life*, produced at the Vaudeville, Sept. 9, 1899. She then played an engagement at the Folies-Dramatiques, Paris, and another in Brussels, and was rehearsing for *Mariage Princier* at the Théâtre de la Renaissance, Paris, at the time of her death.

Nietzsche, Friedrich Wilhelm, a German philosopher, born in Röcken, near Lützen, Oct. 15, 1844; died in Weimar, Aug. 25, 1900. He was the son of a country pastor, passed through the gymnasium at Schulpforte, studied philology at Bonn, and under Ritschl at Leipsic, and on the recommendation of his preceptor was called as professor to the Pädagogium in Basle as soon as he obtained his doctorate. A year later came the Franco-German War, to which he went as a nurse, since as a Swiss professor he could not fight. He became early acquainted with Schopenhauer, and formed an intimacy with Richard Wagner, which he broke off in 1876, the year of the first Bayreuth festival. Till then he was a Teutonic enthusiast like Wagner, afterward a European skeptic. Against the Wagnerian tendencies he conceived an æsthetic and intellectual repugnance that was natural to his earnest and strong temperament, rendered morbidly intense by a severe disease of the eyes and an irritation of the brain that were themselves the effect of too severe application to work and earnest thought and introspection. About the same time his infirmities made it necessary for him to resign his professorship, and from that time he became a restless wanderer, flitting through Switzerland, the south of France, and northern Italy, writing all the time book upon book, with feverish impulse and hurried speed, in spite of illness, pain, and failing sight. This rushing mental labor in connection with the excessive use of sedatives to induce sleep and allay pain brought on an

affection of the brain in 1889 that put a stop to all his productivity, and his later years were passed in a torpid condition of mind, in which he showed some quiet enjoyment of music and the beauties of Nature and appreciation of the tender care of his mother, who nursed him at Baumberg, and of his sister, Frau Elisabeth Förster, who tended him in his final decline at Weimar. Before his mind failed he was such an unconscionable skeptic, such an unsparing analyst, that he drove his intellectual companions and admirers away from him, one after another, until he was left in solitude. His earliest published work was an explanation and justification of Wagnerian art entitled *Die Geburt der Tragödie aus der Geiste der Musik* (1872), distinguishing two kinds of art, one of the dream, illustrated by Homer and Greek sculpture, the other the phrenetic kind, to which belongs tragedy. In his early period he wrote also *Unzeitgemässen Betrachtungen*, four volumes of essays, the first in 1873, the last in 1876. In his period of wandering and mental rebellion he began with *Menschliches, Alzumenschliches, Morgenroth*, and *Die fröhliche Wissenschaft*, produced between 1878 and 1882, full of his famous aphorisms that sound the abysses of the soul, analyze in a sentence confusing problems, and make sport of all that is held sacred or hallowed by tradition. Psychological and ethical problems engage his attention most, and the accepted morality and the holy traditions of European civilization he finds to be all the basest superstition, which he seeks to trace historically and to explain by the new theories of natural science, but finds philosophical explanations of later. In *Also sprach Zarathustra* he first unfolded the doctrine of the *Ueberschensch*, the goal of an endless progressive evolution of humanity that never is reached because the same conditions return. In *Jenseits von Gut und Böse* (1886) and *Zur Genealogie der Moral* (1887) he expounded a new doctrine of morality, heathen and Roman in its origin, the morality of lordship, the glorification of force, far happier and more fruitful than the Christian morality, which with its self-abnegation and hope of future happiness is the morality of slavery. This idea he carried to the most cynical conclusions in his ironical contempt for the sentimentalism of the age. In *Der Fall Wagner* (1888) and *Götzendämmerungen; oder, Wie man mit dem Hammer philosophirt* (1889) he treated the problems in a still more radical fashion, applying his skeptic iconoclasm in a bitter and cruel polemic against his former friend, and in these books the approach of insanity is discernible in this attack and in the predominance given to the examination of morbid conditions and questions of decadence. He concludes that we are physiologically false, have inborn impulses and tendencies of a contradictory nature. *Der Wille zur Macht, ein Versuch zur Umwertung aller Werte*, which was to be his great work, was only begun when his mind became clouded, and Antichrist, the fiercest attack on Christianity written in modern times, was left unfinished.

Nott, Cicely (Mrs. Sarah Ann Adams), an English actress, died in London, Jan. 3, 1900. In early youth she was a singer of remarkable popularity in Julien's promenade concerts. She made her first appearance at Plymouth in 1854, and soon was engaged by Samuel Phelps and played Ophelia, Ariel, and other singing characters during that actor's tour of Ireland. She was similarly engaged in Edinburgh in 1856 and 1857. She married in the last-named city Signor Pio Bellini, a singer and composer. With her husband she became a member of Mr. Nye Chart's musical company in Brighton in 1858, and there her hus-

band died. After a term of retirement from the stage, during which she traveled in Germany, she again joined Mr. Chart's company in 1860, and was for a short time a member of the company at the Theater Royal, Manchester. Her first appearance as an actress in London was at the Lyceum with Miss Lydia Thompson in the burlesque *Little Red Riding-hood*, as Colin, the *Little Boy Blue*, Dec. 26, 1861. While engaged at this theater, where she played some years, she married Samuel Adams and again retired from the stage, only to return in 1869 at the opening of Charing Cross Theater, when she played Pollio in William S. Gilbert's burlesque of *Norma*, then first presented. She retired to private life again about 1880, and devoted herself to the care of her children.

Osman Pasha, a Turkish soldier, born in Amasia, in Asia Minor, in 1837; died in Constantinople, April 4, 1900. He was of pure Turkish race, and entered the military academy at Constantinople in 1850, leaving it as an officer of cavalry in 1854. In the war with Russia that began soon after he served under Omer Pasha. In 1860 he was engaged in the Lebanon campaign, when under pressure from France and Great Britain the Porte undertook to check the excesses of the Druses and promised a charter of rights for the Maronites. In the Cretan campaign of 1867 Osman, who had won a high reputation in the army as a fearless and indefatigable soldier, distinguished himself by capturing the fortified convent of Hagia Georgia. He was marked for promotion, and after taking part in Redif Pasha's expedition into Yemen in 1874 he received the rank of brigadier general, and in 1876 was appointed to the command of an army corps to operate against the Servians, who were beaten by him one time after another. The Russians intervened, crossing the Danube in July, 1877. Osman confronted them with his forces at Plevna, where he erected formidable earthworks in an incredibly short time on the plans of Tewfik Pasha, an accomplished engineer. With rapid marches he first outflanked the Russians unobserved, and defeated a division of Gen. Krudener's army, and afterward the re-enforcements that were sent up, winning the title of Ghazi, the highest in the Turkish army. Intrenched in the hills, Osman Pasha with 60,000 men held the huge Russian army in check for five months. Time and again the Russians and Roumanians attempted to carry the position by assault, and were beaten back with enormous losses. Their crushing superior numbers enabled the Russians to cut off supplies, and by starving the intrepid Turks they forced Osman Pasha to capitulate on Dec. 10, 1877, after the failure of a supreme effort to cut his way through the investing lines. His troops, drawn from all parts of the Ottoman Empire, and all alike in their devotion to him, who held the position without murmuring when their rations were reduced to a third and there was no wood to cook with or warm themselves, rushed the first Russian intrenchments, were brought to a stop by the enemy's supporting troops, rallied and renewed the attack, and when the marshal, struck by a fragment of a shell, fell from his saddle, broke ranks and fled. Osman signed the capitulation on his litter, surrendering 40,000 men, and thus virtually ended the war. The Ghazi, whose heroic defense won the admiration of the world, was made a prisoner by his captors, and was held till the conclusion of peace, when he returned to Constantinople and was charged by the Sultan with the task of reorganizing the Turkish army. He fortified Constantinople in spite of Russian protests. Afterward he was appointed Minister of War, and was loaded

with honors and gifts by the Sultan. Twice afterward he was recalled to the post of Minister of War. Osman Pasha published a history of the defense of Plevna, containing curious public and private documents relating to that celebrated feat of arms. He retired from the Ministry of War in 1885 and was appointed Grand Marshal of the Palace and kept away from the army, as has been the fate of all great Turkish generals.

Palacio, Andueza, ex-President of Venezuela, died in August, 1900. He was carried into the presidency by the Liberal party in 1890, and in 1892 his Government was overturned by a revolution headed by Gen. Crespo, who was the victim of a counter-revolution in 1898. This brought the Liberals again into power, and in the first Cabinet formed by President Cipriano Castro the exiled Palacio, on his return from Paris, received the portfolio of Foreign Affairs. He ceased to be a minister shortly before his death, and was about to depart on a mission to Europe.

Pellechet, Marie Catherine Helene, a French bibliographer, born in Paris in 1840; died at Marly-le-Roi, near Paris, Dec. 11, 1900. Her interest in bibliography manifested itself early, and her later years were entirely devoted to the scientific study of incunabula. Mlle. Pellechet was held in the highest esteem by all French scholars for her literary attainments, and was an honorary librarian of the Bibliothèque Nationale. She published *Notes sur les Livres Liturgiques des Diocèses d'Autun, Chalon, et Mâcon* (Paris, 1883); *Catalogue des Incunables de la Bibliothèque de Dijon* (Dijon, 1886); *Notes sur des Imprimeurs du Comtat-Venaissin et de la Principauté d'Orange et Catalogue des Livres imprimés par eux, qui se trouvent à Bibliothèque de Carpentras* (1887); *Catalogue des Incunables et des Livres Imprimés de la Bibliothèque Publique de Versailles de MD à MDXX* (1889); *Catalogue des Livres de la Bibliothèque d'un Chanoine d'Autun: Claude Guillaud, 1495-1551* (1890); *Alphabet des Imprimeurs du XV^e Siècle* (1893); *Catalogue des Incunables des Bibliothèques de Lyon* (Lyons, 1893); *Catalogue des Incunables de la Bibliothèque de la Ville de Colmar* (1895); *Une Association d'Imprimeurs Parisiens au XV^e Siècle* (1897); *Catalogue Général des Incunables des Bibliothèques Publiques de France*. The last named was her chief work, and the first volume was issued in 1897.

Pellieux, Gen. de, a French soldier, born in 1842; died in Quimper, July 15, 1900. He held one of the highest posts in the general staff from the beginning of the Dreyfus affair, and was one of those chiefly responsible for the prevention of a revision of the trial of 1894. He had charge of the first investigation of Major Esterhazy, and systematically suppressed evidence against that officer. In the Zola trial and in the second Dreyfus trial at Rennes he preserved the same attitude, and made every effort to save Gen. de Boisdeffre and Gen. Gonse. When the reaction came he was one of the first generals to fall into disgrace.

Peter, Grand Duke of Oldenburg, born July 8, 1827; died in Rastade, June 13, 1900. He was the son and heir of the Grand-Duke August, who died Feb. 27, 1853. One of the most liberal constitutions in Germany came into operation at the dawn of the young grand duke's reign, and under the guidance of excellent ministers who possessed his full confidence the land was developed on a liberal basis, the communes receiving extensive powers of self-government, roads and railroads being promoted, the system of education being brought up to a high standard, and great attention being bestowed by the Government on the im-

provement of agriculture. The grand duke was a benefactor to art and literature. He was a furtherer of German unity under Prussian headship, rejecting overtures from Denmark. His successor is Friedrich August, who enters on his reign at the age of forty-seven.

Pickersgill, Frederick Richard, an English artist, born in London in 1820; died at Yarmouth, Isle of Wight, Dec. 27, 1900. He was the son of a painter of note, and a nephew of H. W. Pickersgill, royal academician, and studied under Witherington and at the Royal Academy. His earliest work, *The Brazen Age*, was exhibited in 1839, and in 1841 his *Combat of Hercules* attracted much attention. He gained a prize at the cartoon exhibition at Westminster Hall in 1843 with *The Death of King Lear*, and in 1847 a prize of £500 for *The Burial of Harold*, which was purchased at a similar amount for the Houses of Parliament. He became a royal academician in 1858. Between 1839 and 1875 he exhibited 50 paintings at the Royal Academy, of which he was keeper in 1875-'87. After resigning his office of keeper he lived in retirement on the Isle of Wight.

Pinto, Alexandre Alberto da Rocha Serpa, a Portuguese explorer, born at the Tendas, Portugal, April 20, 1846; died in Lisbon, Dec. 28, 1900. He studied at the Royal Military College in Lisbon, and entered the 7th Infantry Regiment in 1863, becoming ensign the next year. In 1877 he reached the rank of major, and three years later was made aid-de-camp to the King. He crossed the continent of Africa in 1877-'79 from Benguela to Durban, and his narrative of the exploit, entitled *How I Crossed Africa*, has been translated into many languages. Major Pinto received gold medals of the first class from the geographical societies of London, Paris, Antwerp, Rome, and Marseilles.

Pole, William, an English civil engineer, born in Birmingham, April 22, 1814; died in London, Dec. 30, 1900. He was articled to a civil engineer of his native town, and after the expiration of his time was occupied for several years in gas works construction and ventilating and heating projects. In 1840 he became an associate of the Institution of Civil Engineers. He was Professor of Civil Engineering at Elphinstone College, Bombay, in 1844-'47, and filled the same chair at University College, London, in 1859-'67, as well as that of lecturer at the Royal Engineers' Establishment at Chatham for the latter period. He subsequently was secretary to various royal commissions, such as those on water supply and the pollution of the Thames, and was one of the gas referees for the metropolis in 1870-'90. He was honorary secretary to the Institution of Civil Engineers in 1865-'96, Fellow of the Royal Society from 1861, and its vice-president in 1876 and 1889. He was a learned musician and musical critic, although he composed but little. He was an authority on whist and a specialist in precious stones. His writings include *A Treatise on the Cornish Pumping Engine* (1844); *The High-pressure Engine*, from the German of E. Alban (1858); *The Status of Civil Engineers in the United Kingdom and Foreign Countries* (1870); *Iron as a Material of Construction* (1872); *Life of Sir William Fairbairn* (1877); *The Story of Mozart's Requiem* (1879); *The Philosophy of Music* (1879); *The Philosophy of Whist* (1884); *Whist* (1891); *The Evolution of Whist* (1891).

Puttkamer, Robert Victor von, a Prussian statesman, born in 1830; died in Karzin, March 15, 1900. He was the son of the president of the province of Posen. He belonged to a family that has furnished many Prussian officials, and as a

relative and friend of Bismarck his own rise was extremely rapid. He was a strong Conservative, and a prominent member of the party in the German Reichstag, to which he was first elected in 1874. He was president of the provincial government of Silesia when in July, 1879, he was called to succeed Dr. Falk as Minister of Education and Worship, and carry out the details of the compact which Prince Bismarck had made with the Clericals in order to gain their support for his economical and financial schemes. His measure enabling vacant sees and pastorates to be filled did not go far enough to satisfy the Clericals, but too far to please the Liberals. When Count Botho Eulenburg resigned from the Ministry of the Interior on Feb. 27, 1881, Herr von Puttkamer succeeded to that post, and from the beginning he was the target for shafts from the whole Left, which looked upon him as the bringer of reaction and the instrument for carrying out official coercion in elections. When he proceeded with energy, not only to apply the Socialist law against the Socialists and for the prevention of public meetings in Berlin, but to drill the provincial officials into active advocates of the policy of the Government in the spirit of an edict issued by Wilhelm I and in accordance with the views and intentions of the Imperial Chancellor, the Radical leaders constantly assailed him in the severest terms, and he replied with an invective as keen, which rankled the more because it was delivered in an imperturbable, contemptuous tone. He frankly avowed the abuses which they charged, intimating that he was carrying out the King's wishes. The Puttkamer crisis came after Friedrich succeeded to the throne on March 9, 1888. Eugen Richter, on May 26, delivered a speech exposing the methods of influencing elections to the Reichstag that the Minister of the Interior had introduced. The minister at once presented to the new Emperor a memorial defending his conduct. The Emperor expressed strong displeasure at what had taken place to bring about the election of Conservative candidates, and Puttkamer immediately resigned, and the resignation was accepted, whether with the acquiescence of Bismarck, who had been the sponsor, if not the author, of the Puttkamer system, or against his advice, it is not certainly known. Wilhelm II, who came to the throne on June 15, 1888, was expected to recall the disgraced minister, but he contented himself with appointing him chief president of the province of Pomerania.

Queensberry, Marquis of, a British sportsman, born in 1844; died in London, Jan. 31, 1900. He was the son of the seventh marquis, and succeeded his father at the age of fourteen. His contentions with his successive wives and other relatives, his positive and combative declarations in favor of agnosticism and free thought, and other manifestations of a vigorous mind and militant spirit gave him a reputation for eccentricity. He served in the navy in early life, but afterward did none of the things regarded as commendable in a nobleman. After sitting in the House of Lords as a Scottish representative peer from 1872 till 1880 he was not re-elected, but his son, Lord Kelhead, who died in 1894, was created a peer of the United Kingdom. Lord Queensberry was known among sporting men as the author of the rules of the prize ring that bear his name, and as one of the highest authorities on boxing.

Ratisbonne, Louis Fortune Gustave, a French man of letters, born in Strasburg, July 29, 1827; died in Paris, Sept. 24, 1900. He contributed hundreds of literary and other articles

to the *Débats*, but his fame rests upon his poems for children, his work partaking somewhat of the character of both Lewis Carroll's and Robert Louis Stevenson's in the latter's *Child's Garden of Verses*. As a writer of verse for children he was excelled by no French author of his time. He published three collections of prose essays—*Impressions Littéraires* (1855); *Morts et Vivants: Nouvelles Impressions Littéraires* (1860); *Auteurs et Livres* (1868); a translation of Dante's *Divina Commedia* (1859); *Héro et Léandre*, a drama (1859); and the following books of verse: *Au Printemps de la Vie* (1857); *La Comédie Enfantine* (1860); *Dernières Scènes de la Comédie Enfantine* (1862); *Les Figures Jeunes* (1866); *Les Petits Hommes* (1868); *Les Petites Femmes* (1871); *Les Grandes Ombres* (1900). Ratisbonne was appointed librarian at Fontainebleau in succession to Octave Feuillet, and was transferred later to the Palais du Luxembourg.

Reeves, Sims (John Sims Reeves), an English singer, born at Shooter's Hill, Kent, England, Oct. 21, 1822; died in Worthing, Sussex, Oct. 25, 1900. He came first before the public as a singer when eight years of age in local concerts. His first studies of music were made under his father, who was a church organist. The vicar of the parish taught him French and Italian, and at the age of fourteen he became organist and choir-master of the church at North Cray, Kent. His first appearance on the stage was at Newcastle-on-Tyne in December, 1839, as the gypsy boy in *Guy Mannering*, and his success secured for him a continuous engagement. After a few months of work in the provinces, during which he was known by the stage name of Johnson, in 1841 he secured an engagement as second tenor at Drury Lane Theater, then under the management of William C. Macready. He first came into note on account of his singing of the song *Come if You Dare* in the opera of *King Arthur*. After two seasons at Drury Lane, Reeves went to Paris and studied for some months under Signor Bordogni, then to Milan, where he was under the tutelage of Mazzucato. He was invited to sing at La Scala, and made his *début* there as Edgardo in *Lucia di Lammermoor* in 1845. After a season of success in this and other Italian theaters he returned to England, and in December, 1847, made a triumphant *début* in English opera at Drury Lane in his favorite Edgardo. Hector Berlioz, who was the orchestral conductor of the theater, wrote of him: "He has a charming voice of an essentially distinguished and sympathetic character; he is a very good musician, and his face is very attractive." Early in 1848 Reeves made his first appearance in oratorio as Judas Macabæus, under the direction of John Hullah at Exeter Hall, London. He next joined the company at Her Majesty's Theater, where he made a great success as Carlo in *Linda di Chamouni*. In the autumn of the same year he was the principal singer of the Worcester and Norwich musical festivals. Still later in 1848 he achieved great success as Elvino in *La Sonnambula* in Italian at Covent Garden, and thenceforward he was acknowledged the greatest of English tenors. He sang frequently in Paris at the *Théâtre des Italiens*, and was almost as much a favorite there as in London. One of his best stage performances was in Macfarren's opera *Robin Hood*, first produced in London in 1860. From that year he devoted himself principally to oratorio and concert singing. He was always the most notable figure at the Handel festivals in the Crystal Palace. In the winter of 1878-79 he sang in *The Beggar's Opera* and *The Waterman* at Covent Garden.

Theater, and renewed his earlier triumphs. As a ballad singer he was wonderfully popular. His rendering of Tom Bowling was unequaled by any in sweetness, pathos, and dramatic skill. As a recognition of his services to English music, Mr. Reeves was, in the last months of his life, placed on the pension roll of the civil list.

Russell, Charles, Baron of Killowen, an English jurist, born in Newry, County Down, Ireland, Nov. 10, 1832; died in London, Aug. 10, 1900. He studied at Trinity College, Dublin, where he was more known as an athlete than a student, left to enter a solicitor's office, practiced in Belfast for some time, then entered as a student at Lincoln's Inn, was called to the bar in 1859, and began his career as an advocate in Liverpool, making his way rapidly notwithstanding his hasty temper and some lack of ease and fluency. He became a Queen's counsel in 1872, and came to be recognized as the head of the English bar, who was engaged in almost every important case. His crowning triumph was in the Parnell Commission. He was a parliamentary candidate at Dundalk in 1868, and again in 1874, but was defeated, being a Catholic and an Irishman, though neither an avowed home ruler nor yet a Conservative. In 1880 he was elected as an independent supporter of Mr. Gladstone, and his speeches in support of the compensation for disturbance bill and the land act of 1881, and against the crimes act of Mr. Foster and Sir William Harcourt's more stringent one of 1882, were of great advantage to the Irish party, in the obstructive tactics of which he would have no part, and therefore held himself aloof. He declined a puisne judgeship in 1882, was returned for South Hackney in 1885, supported Mr. Gladstone's home rule policy with powerful effect, and was made Attorney-General in February, 1886, and received the honor of knighthood. In Opposition he made important speeches on the report of the Parnell Commission and other Irish matters, and when Mr. Gladstone formed a Cabinet again in 1892 he became Attorney-General once more. In 1894 he entered the House of Lords as a life peer, and on the death of Lord Coleridge he became Lord Chief Justice of England on July 3 of the same year. He sat as an arbitrator of the Venezuela boundary, and delivered later an address on arbitration before the American Bar Association. In the Bering Sea arbitration and in several others he was counsel for the British Government.

Russell, Henry, an English vocalist and song writer, born at Sheerness, England, Dec. 24, 1813; died in London, Dec. 6, 1900. He was the son of a Hebrew merchant, and in his infancy appeared in Christmas pantomimes. He left England in 1825, and was for a time an outdoor pupil at the Bologna Conservatoire. He afterward settled in Rochester, N. Y., taught piano playing there, and soon became widely known as a composer and singer. He traveled extensively in America, giving monologue entertainments, and returning to England at length, repeated his success there. He retired from the concert stage more than forty years before his death, and opened a money-lending office in London. His songs were extremely popular, and yielded him a large income. They are all wholesome, without any flavor of sickly sentimentality, and have been favorites for two generations. Among the best known are *The Ivy Green*; *The Old Armchair*; *A Life on the Ocean Wave*; *Cheer, Boys, Cheer*; and *Woodman, Spare that Tree*. His voice was a heavy baritone of limited compass, but very effective. He published *Part Songs*, *Dramatic Scenes*, *Cantatas*, etc., with *Memoir* (London, 1840); *One Hundred*

Songs, *Music and Words*; *Copyright Songs* (1860); *Treatise on Singing*; *Cheer, Boys, Cheer*, a volume of reminiscences. One of his sons is the well-known novelist William Clark Russell.

Ryle, John Charles, an English clergyman, born in Macclesfield, England, May 16, 1816; died in Lowestoft, June 10, 1900. He was employed for a time in his father's bank, and was a captain in the Cheshire Yeomanry. He was educated at Oxford, and was admitted to orders in 1841. After serving as curate of Exbury in the New Forest, he was successively rector of St. Thomas's Parish, Winchester, 1843; rector of Helmingham, Suffolk, 1841-'61; and vicar of Stradbroke, Suffolk, from 1861. He was appointed rural dean of Hoxne in 1869, and honorary canon of Norwich in 1871. While dean designate of Salisbury in 1880, he was appointed bishop of the newly created diocese of Liverpool. He had long been known as one of the leaders of the evangelical party in the English Church, but he did not bring about such a complete Low Church triumph as was looked for in some quarters, nor did he especially favor the erection of a cathedral for the new diocese. He considered that the diocese stood in more need of churches and mission rooms than of a cathedral, and while he did nothing to prevent the carrying out of the cathedral scheme, he refrained from actively furthering it. Bishop Ryle published more than 200 tracts, of notable excellence for their terse, epigrammatic expression, which were translated into many European languages as well as into Chinese and Hindustani. His more formal works include *Assurance* (1850); *Home Truths*, Series 1-9 (1850-'59); *The Young Man's Christian Year* (1853); *Startling Questions* (1853); *The Priest, the Puritan, and the Preacher* (1855); *Plain Speaking*, Series One and Two (1855); *Expository Thoughts on the Gospels* (1856-'59); *Only One Way of Salvation* (1870); *Spiritual Songs* (1861); *Hymns for the Church on Earth*; *Coming Events and Present Duties* (1867); *The Bishops and Clergy of Other Days* (1868); *The Christian Leaders of the Last Century* (1868); *Expository Thoughts on St. John* (1869); *Shall we Know One Another in Heaven?* (1870); *Home Truths*, Eighth Series (1872); *Knots Untied* (1874); *Hymn Book for Public Worship* (1875); *Holiness and Other Subjects*; *Old Paths* (1877); *Bible Inspiration: Its Reality and its Nature* (1877); *Practical Religion* (1878); *Church Principles and Church Comprehensiveness* (1879); *Boys and Girls Playing and Other Addresses to Children* (1880); *Facts and Men* (1882); *Thoughts on Immortality* (1883); *Principles for Churchmen* (1884); *Thoughts and Questions about Holiness* (1884); *Thoughts on Baptism* (1884); *Thoughts on Sickness* (1884); *The Thing as it is: Questions and Answers about the Lord's Supper* (1885); *Thoughts on Prayer* (1885); *Thoughts for Young Men from Many Points of View* (1886); *The Upper Room* (1887); *Christ and His People* (with W. H. Fremantle) (1888); *Is All Scripture Inspired?* (2d ed., 1898).

Saint Amand, Baron Imbert de, a French historian, born in Paris in 1834; died there, June 22, 1900. He entered the French Ministry of Foreign Affairs in 1855, and rose in the diplomatic service to be a plenipotentiary of the first class in 1882. In 1875 he published a work descriptive of life at the court of Louis XVI, full of interesting details derived from contemporary documents and of glowing sympathetic studies of the royalties and their companions and courtiers. It was entitled *Les Femmes de Versailles*, and was followed by *Les Femmes des Tuileries*, dealing with the personages of Napoleon's court, with the same

warmth and admiration and a just appreciation of their faults at the same time. Other works followed in the series, one printed in 1899 treating of the court of the third Napoleon in 1860, an additional volume being in press when he died.

Samory, an African chief, died in Libreville, June 2, 1900. Before the advance of the French from Senegal he was the hereditary ruler of the Wassulu tribe on the banks of the upper Niger. Profiting by the confusion existing previous to the advent of the French, he made himself master of a vast empire by means of his well-trained and well-equipped army. From the time that the French reached the Niger, in 1884, he tried to oppose their expansion by craft and by force. In 1889 he attempted to drive out Capt. Binger, who was exploring and operating on the Niger. French envoys from the Soudan arranged treaties with him, which he invariably broke. He increased the size of his army by the slave trade and slave raids, and obtained arms and ammunition from the English settlements, where he was regarded not merely as a customer, but as a useful ally to the British in their race for the Niger, who could thwart the more forward and enterprising French. He threatened and attacked the French posts in the Soudan, necessitating the sending of formidable expeditions under Achanard, Combes, Humbert, and Monteil, which drove him away and broke up his army several times. But he escaped to the eastward or northward, rallied his army, ravaged new territories in the Soudan, and returned to harass the French posts after the expeditionary forces were withdrawn. In 1895, after Col. Monteil had returned to the Ivory Coast with his column, Samory, with the help of English munitions, extended his power into the northwestern part of Dahomey, and British political agents recommended supporting him more openly. The occupation of Mossi and Gurunsi in 1896 having enabled the French to connect their Ivory Coast territory with the Soudan, a plan of campaign was adopted by which the forces could close in on Samory from the south and the north. Troops advanced from the southern Soudan to drive him westward, and when he attempted to escape to the east after being defeated at Nzo he was pursued by a flying column under Major Gouraud, which surprised his camp at Guelemon and forced him to surrender on Sept. 29, 1898. He was taken to Kayes, and afterward to Libreville; some of his chiefs were found guilty of having assassinated Capt. Brulot, and were shot; others were interned at Timbuctu or in the French Congo.

Samuel, Sir **Saul**, an Australian public servant, born in London, Nov. 2, 1820; died there, Aug. 29, 1900. He removed to New South Wales in 1832, and received his education at Sydney College, beginning his public career as member of the Legislative Council of New South Wales in 1850. He became Colonial Treasurer in 1857, and after serving several times as Treasurer and Postmaster General was appointed agent general for the colony in London. He devoted himself especially to the finances of the colony, negotiating important loans and making expenditures in its behalf. He was cautious in his business methods, and enjoyed the fullest confidence of his Government. In 1898 he was made a baronet, and after his resignation the same year on account of failing health, he continued to reside in London.

Sanclemente, **M. A.**, President of Colombia, born in 1815; died early in January, 1900. He was elected on Aug. 7, 1898, and relinquished the active duties of his office into the hands of Vice-President Marroquin. His political rôle began

when the Conservative party came into power, and, making Nuñez, its most eminent leader, chief of the executive, united under one administration the nine states of the Colombian federation. Sanclemente became Governor of the department of Cauca, was elected a member of Congress, and was called by Acting-President Caro into his Cabinet as Minister of the Interior after the death of President Nuñez. When the term expired Sanclemente was nominated and elected President for the sake of harmony, and from his retreat of Anapoima, in Cauca, he exercised a moderating influence. Nevertheless his administration had to cope with two formidable revolutionary uprisings.

Saxe-Coburg-Gotha, **Alfred**, Duke of, Prince of Great Britain and Ireland and Duke of Edinburgh, born in Windsor Castle, Aug. 6, 1844; died in Coburg, July 30, 1900. He was the second son of Queen Victoria of England and the Prince Consort Albert of Coburg. Choosing early to follow the profession of a naval officer, he was carefully educated to that end, and was admired for the zeal he showed for his calling and for his practical knowledge of seamanship, gunnery, and naval affairs generally. He received an allowance of £15,000 a year on attaining his majority, and £10,000 more was granted by Parliament when he married Maria Alexandrovna, the only daughter of the Czar Alexander II on Jan. 23, 1874. As rear admiral, chief of marine artillery, member of the Privy Council, and holder of other offices, he drew pay from the British treasury in addition to his appanage. In 1860 he made a voyage to Cape Colony, serving like any other midshipman on board the *Euryalus*, and receiving royal honors only on shore. When King Otto fled from Athens to escape a revolutionary mob, the Boule unanimously offered the vacant Hellenic throne to the Duke of Edinburgh, who shortly before had visited the Piræus in his ship. His election was invalid because England, France, and Russia had agreed, at the foundation of the Hellenic kingdom in 1832, that no scion of their royal houses could ever sit on the Greek throne. In 1867 he received command of the frigate *Galatea*, on which he visited many foreign countries. In New South Wales an Irish Fenian made an attempt to assassinate him, March 12, 1868, at a picnic near Port Jackson. He had five children, including one son, Prince Alfred, born Oct. 15, 1874. It was on his son's account chiefly that he accepted the ducal throne of Saxe-Coburg and Gotha on the death of his uncle, Duke Ernst II, who died without issue, Aug. 22, 1893. In thus expatriating himself to become a reigning German prince he sacrificed the greater part of his income, retaining only his marriage grant of £10,000 a year, wherewith to keep up Clarence House, in which to reside a portion of every year in England. His rank as admiral in the British navy he retained, and after accepting the heirship to the German duchies he was appointed a general of infantry in the Prussian army. His German subjects, who looked coldly on the intrusion of a foreigner, as did also the German princes, grew to like him for complaisant ways that he had never exhibited to the British public. The wedding feasts of his daughters gave delight to the townspeople of the old residence city. Princess Maria married Prince Ferdinand of Roumania in 1893; Victoria was wedded to Ernst Ludwig, Grand Duke of Hesse, in 1894; and Alexandra to the hereditary Prince of Hohenlohe-Langenburg in 1896. The daughters retained the rank and title of princesses royal of Great Britain and Ireland, to be ad-

dressed as Royal Highness. The duchess won the hearts of the Coburgers by her manifold charity. It was a sad disappointment to the ducal pair when their son died, Feb. 6, 1899. The Duke of Saxe-Coburg was attacked by cancer of the tongue, but died from heart weakness without knowing what the malady was that undermined his health. His heir is the youthful Duke of Albany, the posthumous child of Prince Leopold, youngest son of Queen Victoria, who has received a military education at Potsdam to prepare him for the duties of a German prince, which he will not take up before 1905, the hereditary Prince of Hohenlohe-Leiningen being regent so long as he is a minor.

Schnadhorst, Francis, an English politician, born in Birmingham, Aug. 24, 1840; died in Roehampton, Jan. 2, 1900. He was educated in King Edward VI's grammar school in Birmingham, succeeded to his father's business as a draper and hosier, interested himself in local literary and educational societies, and later in politics, organized in 1870 the nonconformist committee that fought the subventioning of Church schools, and in 1873 the Birmingham Liberal Association on the system of the American primaries, which secured the defeat of the Conservatives in the town elections and made Joseph Chamberlain mayor. The caucus system was next applied to national politics, with the result that the Liberals carried Birmingham in the parliamentary election of 1874, in which the Conservatives swept the country. The Liberals therefore called upon Mr. Schnadhorst to teach his plan of organization to other politicians, and when more than a hundred such associations united in the National Liberal Federation he, with Mr. Chamberlain at his back, was its organizer and secretary. The introduction of popular party management infused new life into the Liberals, who were victorious in the general election of 1880. The new system could not be preserved in its purity, and after the desertion of Mr. Chamberlain and the gradual breakdown of Mr. Schnadhorst's health the Liberal Federation lost much of its independence and influence, while the Unionists adopted with successful results some of its features and formed closer popular organizations than the Liberals still maintained.

Sedille, Paul, a French architect and painter, born in Paris in 1836; died there, Jan. 6, 1900. He entered the École des Beaux Arts as a student in 1857, and in 1878 was the laureate of the grand medal of the Société Centrale, awarded for excellence in private architecture. Among his works are the great department store at Paris, Au Printemps, and the basilica of Jeanne d'Arc at Domremy. He exhibited many paintings from year to year, and wrote extensively on professional topics.

Shuttleworth, Henry Cary, an English clergyman, born Oct. 25, 1850; died in London, England, Oct. 24, 1900. He was the son of a Cornish clergyman, and was educated at Oxford. He was ordained curate of St. Barnabas's parish, Oxford, and in 1874 became a minor canon of Oxford Cathedral. From 1876 to 1884 he was a minor canon of St. Paul's, London, resigning in the last-named year to accept the chapter living of St. Nicholas Cole Abbey, London, the representative of six united city parishes. With the design of making his church in Queen Victoria Street of the most practical benefit to the working community in which it was situated, he opened it daily and had midday services, musical and devotional, with addresses on all kinds of subjects, "from Dante to Dickens, and from sanita-

tion to socialism." He drew a large Sunday congregation also, and on Sunday evenings he himself conducted a large volunteer choir through a series of oratorios. He much disliked the so-called "imprecatory psalms," and was accustomed to omit reading them whenever they occurred in the service, until requested not to do so by the Bishop of London, the year before his death. About 1890 he founded the Shuttleworth Club for the benefit of employees in the city warehouses. In politics he was a pronounced Liberal and thoroughly devoted to the cause of Christian socialism. His writings include *The Seven Last Words of Our Saviour* (Oxford, 1879); *Songs* (1885); *The English Church and the New Democracy* (London, 1885); *Contemporary Fiction* (1888); *The Place of Music in Public Worship* (1892); *Some Aspects of Disestablishment* (1894); *Hymns for Private Use* (1895).

Sidgwick, Henry, an English philosopher, born in Skipton, Yorkshire, May 31, 1838; died in Witham, Aug. 28, 1900. He came of a family of scholars, and had a brilliant career at Cambridge. He became a fellow of his college in 1859, but resigned ten years later because the tenure of his fellowship implied conformity to theological propositions to which he could not longer subscribe. After being lecturer at Cambridge from 1859 to 1875, he was made prelector of moral philosophy in the latter year, and professor of the same in 1883. On account of failing health he resigned his professorship not long before his death. Sidgwick exerted a deep influence upon his generation, not only as a searching critic who dispelled the indifference that had hitherto prevailed in relation to English philosophy, but as a zealous advocate of the higher education of women. His personal character won for him a wide circle of friends, and those who cared little for his subtle reasoning were attracted by his intellectual sincerity and stimulating converse. His principal works are *The Methods of Ethics* (London, 1874); *The Principles of Political Economy* (1883); and *The Elements of Politics* (1891). Besides innumerable contributions to reviews and magazines, he published also *The Ethics of Conformity and Subscription* (1879); *The Scope and Methods of Economic Science* (1885); and *Outlines of the History of Ethics, for English Readers* (1886). Prof. Sidgwick was for some time President of the Society of Psychical Research, and one of the founders of Newnham College, Cambridge. He was made honorary fellow of his college in 1881, and received the degree of LL. D. from the universities of Edinburgh, Glasgow, and St. Andrews, and D. C. L. from Oxford.

Smyth, Charles Piazzi, an English astronomer, born in Naples, Italy, Jan. 3, 1819; died Feb. 21, 1900. He was the second son of the astronomer and hydrographer Admiral Smyth, and was named Piazzi, after the discoverer of Ceres. He was employed in the Observatory at the Cape of Good Hope from 1835, and in 1845 was appointed astronomer royal for Scotland, which post he retained till 1888, when he retired on a pension. To the general public he was best known by his fantastic speculations concerning the Great Pyramid, which he had visited and investigated in 1865. In 1871 he began to prepare an exhaustive star catalogue and ephemeris of all the Edinburgh and best contemporary observations of the same stars, which were issued subsequently in the fourteenth and fifteenth volumes of the Edinburgh Observatory's publications. After his retirement he devoted much time to solar photographic spectroscopy. He published *The*

Great Pyramid and the Royal Society (1874); and New Measures of the Great Pyramid (1884).

Stevens, George Warrington, an English war correspondent, born in London, Dec. 10, 1869; died in Ladysmith, Natal, South Africa, Jan. 18, 1900. He was educated at Oxford, and adopted the profession of journalism. His journalistic writing was of the lighter kind, relieved by humor, and was both clever and effective. He accompanied Kitchener in the last Soudan campaign, was the special correspondent of the Daily Mail in 1899 in India, and was with the army in the same capacity in South Africa. He was the author of *Monologues of the Dead* (1896); *Naval Policy* (1896); *Stella's Story*, a Venetian Tale (1896); *The Land of the Dollar* (1897); *With the Conquering Turk* (1897); *Egypt in 1898* (1898); *With Kitchener to Khartoum* (1898); *In India* (1899); and *The Tragedy of Dreyfus* (1899).

Stevenson, Robert Alan Mowbray, a Scottish art critic, born in Edinburgh, March 25, 1847; died April 18, 1900. He was a cousin of Robert Louis Stevenson, the novelist. He was educated at Cambridge, and after leaving the university studied painting with Ortmans at Fontainebleau, and later was a pupil of Carolus Duran. He joined the staff of the Saturday Review as art critic in 1885, and was Professor of Fine Arts at Liverpool University College in 1887-'93. In the last years of his life he was art critic of the Pall Mall Gazette. His only published books are *The Devils of Notre Dame* (1894) and *The Art of Velasquez*, a work of abiding value.

Stewart, Sir Donald, a British soldier, born near Forres, Morayshire, in 1824; died in Algiers, March 26, 1900. He was descended from a distinguished Highland family, was first sent to school when only four years old, and although not studious, acquired an early acquaintance with the classics. He left Aberdeen University at the age of sixteen to take a cadetship in the Indian army, fought with credit against the tribes on the Afghan border in 1854 and 1855, having then reached the rank of captain, and at the beginning of the mutiny made himself famous by carrying dispatches into Delhi. He served as assistant adjutant general to the Delhi field force during the rest of the campaign, making his mark as a staff officer. Toward the end of 1857 Sir Colin Campbell, when marching to the relief of Lucknow, made him assistant adjutant general of the Bengal army, and after the mutiny he was promoted to be lieutenant colonel, and retained on the staff as assistant adjutant general till 1862, and then deputy adjutant general till 1867, being promoted colonel in 1863. He had much to do with the formation of the new Bengal army which replaced the one that had mutinied. In 1867, as brigadier general in command of the contingent of the Bengal army sent to co-operate with Sir Robert Napier in Abyssinia, he performed important services, and was made a major general. He commanded the frontier division of Peshawar which held open the Khaibar pass in 1868. In 1871 he was sent by Lord Mayo to organize the convict settlements of the Andaman Islands into self-supporting industrial colonies, which he accomplished, although one of the incidents of the transformation was the murder of the Viceroy by a convict. After taking a vacation for his health he returned to India in 1875, commanded the Lahore division, and in 1878 was placed in command of the Kandahar field force, with which he advanced through the Bolak and Khojak passes, dispersed the Afghans at Saifuddin, and captured Kandahar. In consequence of the murder of Sir Louis Cavagnari he was sent with an

army of 5,000 men against Kabul. He won the battle of Ahmud Khel with his artillery, captured the Afghan capital, and exercised supreme military and civil power in Afghanistan until he was ordered by the Indian Government to evacuate the country, which he accomplished by sending one division under Gen. Roberts back to Kandahar and leading the rest of the army through the Khaibar pass. He was knighted for his services, and in 1880 was appointed military member of the Viceroy's Council. In 1881 he was created a baronet, and succeeded Sir Frederick Haines as commander in chief of the Indian army. He planned and initiated the system of defenses by which the whole northwest frontier was brought under command of a strategic series of military railroads and roads connecting fortifications with fortified camps and supply bases, the policy that was carried out by his successor, Lord Roberts of Kandahar. The campaign in Burmah ending with the occupation of Mandalay and the annexation of Thebaw's kingdom was fought under his supreme command, and he secured the increase of the army in India by 10,500 British and 21,000 native troops. His promotion to lieutenant general was in 1877, to general in 1881. He laid down the command in 1885 and returned to England, and was a member of the council of the Secretary of State for India till his death, and from 1895 governor of Chelsea Hospital, having in the preceding year received the baton of a field marshal.

Stokes, Margaret McNair, an Irish archaeologist, born in Dublin, Ireland, in 1832; died in Howth, Sept. 20, 1900. She was a daughter of the late Dr. William Stokes, and sister of Sir William Stokes, mentioned below. In 1867 she accompanied her father in an archaeological tour conducted by the Earl of Dunraven through Galway, Sligo, and the Isle of Arran, the results of which appear in the earl's *Notes on Irish Architecture*, left unfinished at his death, but completed and edited by Miss Stokes. She subsequently traveled in Italy and France, and the record of her investigations there will be found in her *Six Months in the Apennines: A Pilgrimage in Search of the Vestiges of Irish Saints* (1892) and *Three Months in the Forests of France* (1895). Other works of hers are *Early Christian Architecture in Ireland* (1876); *Early Christian Art in Ireland* (1887); *Notes on the Cross of Cong*; *The High Crosses of Castledermot and Durrow* (1900). She also edited *Christian Inscriptions in the Irish Language* (1872-78).

Stokes, Sir William, an Irish surgeon, born in Dublin, March 10, 1839; died at Pietermaritzburg, Natal, South Africa, Aug. 18, 1900. He was the second son of William Stokes, Professor of Medicine in the University of Dublin, and received his education at the Royal School, Armagh, at Trinity College, Dublin, and at medical schools in Berlin, Vienna, Paris, and London. He had been in active practice from 1863, and was knighted in 1886. He was president of the Royal College of Surgeons in Ireland in the last-named year, and had been surgeon in ordinary to the Queen in Ireland from 1892. Two months after the outbreak of the Transvaal War in 1899 he was nominated surgeon to the South African forces. He was the author of *The Altered Relations of Surgery to Medicine* (1888) and a life of his father (1898).

Stone, Samuel John, an English clergyman and hymn writer, born in Whitmore, Staffordshire, April 25, 1839; died in London, Nov. 19, 1900. He was educated at Oxford, and took orders in 1862. For the next eight years he was a curate at Windsor, and for the twenty years

succeeding was at St. Paul's, Hoggston, in the East End of London, as curate 1870-'75, and as rector for the remaining period. From 1890 until his death he was rector of Allhallows, London Wall, where in his latest years he practiced a singular but very helpful experiment. Having observed that hundreds of working women came up to London on the early trains for workmen, in order to take advantage of the cheaper fare, and were in consequence obliged to walk about the streets until the hour for opening the factories, he caused Allhallows Church to be opened very early every week day for their accommodation while waiting. The opportunity was taken advantage of by a very large number who otherwise would have been forced to wait in the open air in all weathers. He published *Lyra Fidelium* (1866); *The Knight of Intercession* (1872; 7th ed. 1892); *Sonnets of the Sacred Year* (1895); and *Lays of Iona* (1898). He will probably be longest remembered by his familiar hymn, *The Church's One Foundation*.

Sullivan, Sir Arthur Seymour, an English composer, born in London, May 13, 1842; died there, Nov. 21, 1900. He was a son of Thomas Sullivan, bandmaster in the Royal Military College, Sandhurst. By his mother he was of Italian Jewish descent. His youth was spent under the instruction of his father until at twelve years of age he became a member of the boy choir in the Chapel Royal at St. James's. He published his first composition at the age of thirteen, an arrangement of the anthem *Teach Me, O Lord, the Way of Thy Statutes*. In the following year he won the Mendelssohn scholarship at the Royal Academy of Music. He went in 1858 to the Leipzig Conservatory, and remained there until 1861. While in Leipzig he composed his *Feast of Roses* and music to Shakespeare's *Tempest*. This last was produced on his return to England at the Crystal Palace, April 5, 1862. From that date he was a recognized master among English musicians. His next work was *Kenilworth*, a cantata sung at the Birmingham festival in 1864. Then followed *L'Isle Enchantée*, played at Covent Garden in 1864; *In Memoriam*, an overture, played at the Norwich festival in 1866; *The Prodigal Son*, an oratorio (1869); *Overture de Ballo* (1870); *On Sea and Shore*, a cantata with words by Tom Taylor (1871); a *Te Deum* on the recovery of the Prince of Wales (1872); *The Light of the World*, an oratorio, at the Birmingham festival (1873); *The Martyr of Antioch*, an oratorio sung at the Leeds festival (1880); and *The Golden Legend*, a cantata sung at the Leeds festival (1886). Besides these, Sullivan's serious work includes the music of *Onward*, *Christian Soldiers*, and *The Lost Chord*, both world known. Sullivan's work on what came to be a national school of comic opera began in 1866, when in collaboration with Francis C. Burnand he wrote the operetta *Box and Cox*, produced at the Adelphi, London. From its success he began to devote his abilities to dramatic work, and in 1871 entered into the famous association with William S. Gilbert. Their first effort was *Thespis*, or *The Gods Grown Old*, a burlesque, produced at the Gaiety Theater, London, Dec. 26, 1871, with John L. Toole and Nellie Farren in the principal rôles. A little known work which followed *Box and Cox* in 1867 was *The Contrabandista*, produced in New York under the name of *The Chieftain*. In 1875 they wrote *Trial by Jury*, a one-act operetta, for D'Oyly Carte, manager of the Royalty Theater. This sketch—written, rehearsed, and produced (March 25, 1875) in three weeks—was enormously successful. For nearly twenty years from that time Gilbert and

Sullivan worked together toward the highest distinction in comedy and its music. Their works, nearly all of which were first produced by D'Oyly Carte at the Opéra Comique and Strand Theaters, in London, were not only wonderfully popular in England, but speedily passed to equal renown in all civilized countries and languages. The names and dates of these are: *The Sorcerer*, Nov. 17, 1877; *H. M. S. Pinafore*, May 25, 1878 (ran two years); *The Pirates of Penzance*, April 3, 1880; *Patience*, April 25, 1881; *Iolanthe*, Nov. 25, 1882; *Princess Ida*, Jan. 5, 1884; *The Mikado*, March 14, 1885; *Ruddigore*, Jan. 27, 1887; *The Yeoman of the Guard*, Oct. 3, 1888; and *the Gondoliers*, Dec. 7, 1890. Sullivan and Gilbert separated in 1890 on account of a quarrel between Mr. Gilbert and D'Oyly Carte. Sullivan's grand opera *Ivanhoe* was produced by the latter at his new opera house, Jan. 31, 1891, and ran for one hundred nights. Sydney Grundy wrote the libretto of *Haddon Hall*, which was produced with Sullivan's music in September, 1892. Sullivan and Gilbert came together again, and *Utopia Limited*, their united work, was played Oct. 7, 1893. Their next opera was *The Grand Duke*, March 7, 1896. Pinero and Comyns Carr wrote the libretto of Sullivan's romantic opera *The Beauty Stone*, May 28, 1898; Captain Basil Hood that of *The Rose of Persia*, first played Nov. 29, 1899. Sir Arthur composed a national ballet entitled *Victoria and Merrie England*, in honor of the Queen's sixtieth year, produced May 25, 1897. He recently composed music for Kipling's poem *The Absent-minded Beggar*, and had completed a new opera, to be called *The Emerald Isle*, in collaboration with Capt. Basil Hood. He was knighted in 1883, and was made a chevalier of the Legion of Honor of France in the same year. He received the degree of doctor of music from Oxford and Cambridge.

Symons, George James, an English meteorologist, born in London in August, 1838; died there, March 10, 1900. He was educated at St. Peter's Collegiate School, and at the age of sixteen offered his services to James Glaisher, founder of the Meteorological Society, who discouraged his scientific aspirations as leading to a life of poverty. He persisted, however, and in 1857 became one of the meteorological reporters for the registrar general. He assisted Admiral Fitzroy to organize the British system of storm warnings, and independently began to collect records of rainfall, publishing his first annual report in 1860, having found volunteers to furnish the records of 168 stations. For forty years he persisted in organizing voluntary observers, and in 1898 he had records from 3,404 stations. In 1866 he began his *Monthly Meteorological Magazine*.

Tarbé des Sablons, Edmond Joseph Louis, a French dramatist, born in Paris, Feb. 20, 1838; died there, Dec. 15, 1900. He was first educated for the law, but took up journalism in early life. After some years of successful work in Paris, he founded, in association with Henri de Pène, the Parisian journal *Gaulois*, in 1868. In 1877 he devoted himself to novel writing, in which he became very popular. He wrote, in association with Adolphe d'Ennery, a drama in five acts called *Martyre*, produced March 4, 1886. His next piece was *Monsieur de Morat*, a comedy in five acts, first played March 16, 1887. With Pierre Decourcelle he wrote *Gigolette*, a drama in five acts, first played Nov. 25, 1893. *La Maitresse de l'École* and *L'Histoire d'Angèle Valoy* were also from his pen. His published novels were *Les Dames Parisiens* (1884); *Monsieur de Morat* (1886); *Le Roman d'un Crime* (1887); and *L'Histoire d'Angèle Valoy*.

Tarleton, Ernest (Ernest Thompson), an English actor, born in London in 1869; died in Toronto, Canada, March 20, 1900. He was a son of Alfred Thompson, an English artist. His first appearance was in London in the company of John Hare, and within a few months thereafter he was engaged for the first stock company of the Lyceum Theater, New York city. He was continuously and actively a member of this organization until transferred to the support of Mr. E. H. Sothern, with whom he was playing the part of D'Artagnan's valet in *The King's Musketeers* at the time of his fatal illness.

Teck, Francis, Duke of, born in Vienna, Aug. 27, 1837; died in Richmond, England, Jan. 21, 1900. He was the only son of Duke Alexander of Württemberg and hismorganatic wife, Countess Claudine de Rhedey, who received the title Countess of Hohenstein. He studied in the Austrian Academy of Engineers from 1849 to 1853, was commissioned a lieutenant of lancers in 1854, later as a captain of hussars, and in the Italian campaign of 1859 he served with gallantry at Solferino as orderly officer to Field-Marshal Count Wimpfen. After the campaign of 1866 he left the Austrian army, having married on June 12 Mary Adelaide, Princess of Great Britain and Ireland, the youngest sister of the Duke of Cambridge. The first years of their married life were passed in Kensington Palace, where the allowance of £5,000 a year granted to the duchess by Parliament proved insufficient. In 1883 they left England, raising money by selling valuables of the duchess at auction, and lived for a time in the Tyrol, afterward at Florence, returning ultimately and taking up their residence at White Lodge, Richmond, the gift of Queen Victoria. In 1882 the duke served on Sir Garnet Wolseley's staff in Egypt, and was present at Tel-el-Mahuta and Tel-el-Kebir. He was made a colonel in the British army on his return, and promoted major general in 1893. He held the honorary rank of lieutenant general in the German army. The Duchess of Teck died on Oct. 27, 1897, and the duke, whose health was shattered, lived in complete seclusion from that time. Of their four children Princess Mary, born May 26, 1867, married George, the Duke of York, on July 6, 1893; Prince Adolphus, born Aug. 13, 1868, married the third daughter of the Duke of Westminster in 1894, and served in the Boer war as a captain in the Life Guards; Prince Francis, born Jan. 9, 1870, was educated at Sandhurst, became a captain in 1894, served with the Egyptian army in the Soudan, and saw active service in the war in South Africa; and Prince Alexander, born April 14, 1874, was educated at Sandhurst also, and commissioned a lieutenant of hussars.

Tirebuck, William Edwards, an English novelist, born in Liverpool; died there, Jan. 22, 1900. He was educated in his native city, and after some commercial experience was subeditor of the *Liverpool Mail*, and subsequently was for six years subeditor of the *Yorkshire Post*. Afterward he was entirely devoted to authorship. He possessed extensive art knowledge, and his work in fiction was conscientious. His published works comprise *William Daniels: Artist* (1879); *Dante Gabriel Rossetti: His Work and Influence* (1882); *Great Minds in Art* (1888); *The Discontented Maidens*, a dramatic cantata (1887); and the following novels: *Saint Margaret* (1888); *Dorrie* (1891); *Sweetheart Gwen* (1893); *The Little Widow and Other Episodes* (1894); *Miss Grace of All Souls* (1895); *Jenny Jones and Other Tales from the Welsh Hills* (1896); *Meg of the Scarlet Foot* (1898); and *The White Woman* (1899).

Traill, Henry Duff, an English man of letters, born in Blackheath, Kent, Aug. 14, 1842; died Feb. 21, 1900. He was educated at Oxford, and in 1868 was called to the bar. Three years later he engaged in journalism, and he was on the staff of the *Pall Mall Gazette* in 1873-'80; the *St. James Gazette*, 1880-'82; the *Telegraph*, 1882-'96; and the *Saturday Review*, 1883-'94; and he was editor of the *Observer* in 1889-'91, and of *Literature* in 1898-1900. Traill was a sound critic, a man of wide attainments, and the possessor of an excellent style. He edited the six volumes of *Social England* (1892-'96), and contributed to the *English Citizen Series*, *Central Government* (1882); to the *English Men of Letters Series*, *Sterne* (1882) and *Coleridge* (1884); to the *English Worthies Series*, *Shaftesbury* (1886); to the *Twelve English Statesmen Series*, *William the Third* (1888); to the *English Men of Action Series*, *Strafford* (1889); and to the *Queen's Prime Ministers Series*, *Lord Salisbury* (1891). His other works are: *Recaptured Rhymes* (1882); *The New Lucian*, his finest bit of writing (1884; revised and enlarged, 1900); *Saturday Songs*, a collection of clever satirical verse (1890); *Number Twenty* (1892); *The Life of Sir John Franklin* (1896); *From Cairo to the Soudan Frontier* (1896); *Barbarous Britishers*, a novel (1896); *Life of Lord Cromer* (1897); and *The New Fiction and Other Essays on Literary Subjects* (1897).

Tuer, Andrew White, an English publisher, born in Sunderland in 1839; died in London, March 24, 1900. Soon after coming of age he entered a London firm of stationers and printers as a partner, and, after his invention of "Stick-phast" paste, founded and edited the *Paper and Printing Trades' Journal*. A little later he engaged in book publishing and became an author himself, his tastes inclining toward antiquarian research. His writings include *Luxurious Bathing* (London, 1880); *Bartolozzi and his Works*, a carefully written monograph (1881); *London Cries* (1883); *John Bull's Womankind* (1884); *Old London Street Cries and the Cries of To-day* (1885); *Follies and Fashions of Our Grandfathers* (1887); *The First Year of a Silken Reign, 1837-'38*, with C. E. Fagan (1887); and *History of the Hornbook* (1896).

Valfrey, M., a French journalist, born in 1838; died in Paris, Nov. 23, 1900. He wrote articles on foreign policy and events for the *Figaro* under the signature of Whist, was called into the diplomatic service by the Duc Decazes and placed on the Committee of Archives, with the rank of a minister plenipotentiary. He lost his office when the Conservative ministry was driven out in 1877, but was employed by subsequent ministries, first on a mission sent to Portugal to arrange financial matters, and several times afterward to adjust international debts in the interest of French creditors, developing much ability in the negotiation of financial settlements. He became for a while the editor of the *Moniteur*, an Orleanist organ, and then joined the staff of the *Figaro* to write the daily article on foreign affairs. In times of popular excitement over international questions his articles had a moderating influence.

Vicaire, Louis Gabriel Charles, a French poet, born in Belfort, Jan. 24, 1848; died in Paris, Sept. 24, 1900. His earlier years were passed at Bresse and Bugéy, but he studied law at a later period and became an advocate. He published in 1884 *Emaux Bressans*, a successful book, which constitutes his best title to inclusion among the French poets of his day. This was followed by *L'Heure Enchantée*; *Les Délivrescences d'Adore Floupette* (1885); *La Légende de Saint Nicolas*

(1888); *Au Bois Joli* (1894); *Le Clos des Fées* (1898). In 1883 he contributed a long prose introduction to *Guillon's Chansons Populaires de l'Ain*, his only prose writing of importance, and in 1888 he obtained a gold medal for his lyric poem, *Quatre-vingt-neuf, Chant Séculaire*.

Villaume, Karl von, a German soldier, born in 1840; died in Berlin, June 3, 1900. He was an ordnance expert who served on the staff almost from the time of his entrance into the army. In 1877, as a captain of the general staff, he was attached to the Russian headquarters during the war in the Balkans, and at its close he was appointed military *attaché* of the embassy in Rome, which post he exchanged in 1882 for that of first military *attaché* in Paris, having reached the rank of lieutenant colonel. There he obtained documents from a French traitor that revealed the operations of the French spy system, and to the French, who were wrought up by suspicions of German spies and angered against military *attachés* as a class, he appeared to be the head and front of the espionage that they dreaded, and had to give up the post, having won as much credit at home as he lost in France. He was nominated aid-de-camp to the Emperor, and in 1886 he succeeded Gen. von Werder as military plenipotentiary at St. Petersburg. He served several years in this post to the satisfaction of his Government, was then recalled to take command of an artillery brigade at Stettin, the first time that he was with the troops since he was a lieutenant, and in 1896 was appointed director of the staff college in Berlin.

Villebois-Mareuil, Col. de, a French soldier, born in 1847; died in South Africa, April 5, 1900. He was educated for the army at St. Cyr, received a commission in 1867, served in Cochinchina, was captain of chasseurs in the Army of the Loire in 1870, received a severe wound at the recapture of Blois, and for his brave conduct was decorated on the battlefield. He was attached to the war school in 1871, and in 1882, when Gen. Boulanger became Minister of War, he received an appointment on the general staff. He was sent to Algeria in 1888, having then the rank of lieutenant colonel, was promoted to a colonelcy in 1892, held commands successively in Mayenne, Soissons, and in Algeria, and in 1895 resigned from the army on account of a family bereavement and devoted himself to old soldiers' societies. He was the author of a romance entitled *Sacrifiés*, which appeared in the *Revue des Deux Mondes* in 1890, under the pseudonym of Georges Simny; of one called *Entre Civilisés*, published in 1896; and of a third, *Audessus de Tout*, printed in 1899. When the war in South Africa broke out he went to offer his services to the Transvaal, and was the chief adviser of the Boer generals on artillery tactics. Passing near Boshof with a small detachment he was overtaken by a British scouting party and killed.

Wilde, Oscar Fingall O'Flaherty Wills, an Irish poet, born in Dublin, Oct. 16, 1856; died in Paris, Nov. 30, 1900. He was the son of Sir William Wilde, surgeon-oculist to the Queen, and Lady Jane Wilde, who as *Speranza* was a well-known Irish lyricist in the fifties. After a brilliant university career at Trinity College, Dublin, and at Oxford, he traveled in Italy and Greece, and, returning to London in 1879, originated the peculiar æsthetic movement satirized in the opera of *Patience*. In 1881 he went to the United States and lectured on art, and he afterward lectured in England and in Paris. He met with great social success, and his poems and society plays were popular. In 1894 he was convicted of felony, for which he served a sentence of two years in prison.

After his release in 1897 he lived in the Latin Quarter of Paris, under the name of Sebastian Melnotte. In his last hours he was received into the Roman Catholic Church as a penitent. He published *Newdigate Prize Poem Ravenna* (London, 1878); *Poems* (1880); *Vera*, a comedy (1882); *The Happy Prince*, and *Other Tales* (1888); *Dorian Gray*, a novel; *The Portrait of Mr. W. H.*, a theory respecting Shakespeare's *Sonnets*; *Intentions*, a collection of essays (1891); *Guido Ferranti* (1890); *The Duchess of Padua*, a blank-verse tragedy (1891); *Lady Windermere's Fan*, a skillfully written comedy (1893); *Salome*, a tragedy (1894); *A Woman of no Importance*, a comedy (1893); *The House of Pomegranates*, poems in prose; *The Sphinx*, a poem; *Lord Arthur Saville's Crime*, a collection of short stories; *An Ideal Husband*, a play; *The Importance of Being in Earnest*, a play (1895); and *The Ballad of Reading Gaol* (1898). The last-named work, which appeared anonymously, is a strong poem, and has been called his finest literary effort. His verse is almost always melodious, and abounds in exquisite descriptive passages. The authorship, in part at least, of Mr. and Mrs. Davenport, a problem play (1900), has been attributed to him.

Williams, Frederick, an Irish actor, born in Dublin in 1829; died in New York city, Sept. 5, 1900. He was educated in his native city as an architect. He made his first appearance at the Smock Alley Theater, Dublin, as Tybalt in *Romeo and Juliet*, in 1850. For two years he played the usual succession of rôles in the stock companies in Ireland, and in 1852 was engaged at the old National Theater, Cincinnati. His first appearance was as Cateby in *Richard III.* in the autumn of 1852. He remained an active and important member of that company for seven years. He then toured as a star from 1859 to 1861. He was next engaged as leading actor of the Holliday Street Theater, Baltimore, where he played until the civil war, during which he again made a starring tour lasting two years. In the spring of 1864 he went to New York city as leading man of George Wood's Theater (afterward Wallack's), and in the autumn of the same year accepted a place as light comedian in the Boston Museum. In 1865 he became stage manager of that house, and he remained in that place fourteen years, during which all productions were supervised by him, and many adaptations of foreign plays arranged for the stage. In 1879 he became stage manager of Daly's Theater, New York, where he remained four years. He then traveled two seasons with the company of the late Frank Mayo, and three with the Boston Ideals. In 1887 he was engaged as stage manager of the Lyceum Theater, New York, the duties of which he performed faithfully up to the date of his last illness. His last important work was the preparation of E. H. Sothorn's production of *Hamlet*.

Wimperis, Edmund M., an English artist, born in 1835; died at Southbourne, England, Dec. 25, 1900. He went to London in early life, and learned wood engraving under Birket Foster. As an engraver he attained a high degree of excellence, and many exquisite examples of his workmanship may be found in the illustrated books of the sixties. When wood engraving declined he turned his attention to water-color painting and, though almost entirely self-taught, met with great success. His taste was almost entirely for landscapes, and he cared little or nothing for human incident. In later life he painted in oils, and was almost equally successful in this branch of art. He followed Haag as vice-president of the Royal Institute of Painters in Water Colors.

Woodgate, Sir Edward Robert Prevost, a British soldier, born in Belbroughton, Worcestershire, in 1845; died in Natal, March 25, 1900. He was the son of a clergyman, was educated at Radley, joined the army in 1865, served in the Abyssinian expedition of 1868, being present at the action of Arogee and the capture of Magdala, was employed on special service in 1873 and 1874 in the Ashanti war, taking part with gallantry in the various engagements and the capture of Kumassi. Lieut. Woodgate passed through the staff college in 1877, and when the South African War of 1879 broke out he was again selected for special employment, and won fresh honors as staff officer of the flying column in the Zulu campaign, being brevetted a major for his conduct at Kambula and Ulundi. From 1880 till 1885 he served in the West Indies as brigade major. In 1898 he was sent out to Sierra Leone to organize the new West Indian regiment, with which he conducted operations against Bai Bureh and other chiefs who rebelled against the hut tax. He returned home in 1899 with broken health, which was scarcely restored when he was given command of a brigade that was ordered to South Africa in the division commanded by Sir Charles Warren. Crossing the Tugela about a month after his arrival, Gen. Woodgate occupied Spion Kop with his command, and was dangerously wounded in the head in the fighting that ensued on the following day, so that he was relieved of the command before the force was withdrawn. His wound ultimately proved fatal. He was knighted for his services in Sierra Leone.

Wright, George Robert Nicol, an English antiquary, born in 1810; died in Kew, April 2, 1900. He was connected with the British Archaeological Association from its foundation in 1843, and for many years arranged the congresses of the association, the success of which was due largely to his efforts. He wrote *Local Lays and Legends, Fantastic and Imaginary* (1885) and *Archæologic and Historic Fragments* (1888), and he was also a frequent contributor to the periodical press.

Young, William, a British architect, born in Paisley, Scotland, in 1843; died in Putney, England, Nov. 1, 1900. He went to London in the early sixties and opened an office, but was without business connections or professional acquaintance. By a mere chance he was employed soon after his arrival by Lord Wemyss (then Lord Elcho), and his rise in his profession was rapid and continuous from that time. His most important completed work is the Municipal Buildings at Glasgow, an imposing structure in the severely classical style, finished in 1889. It was several years in building, having been begun about 1880, and the design submitted by Mr. Young was selected from among 126. Not long before his death he was appointed architect of the new War Office. He had completed his designs in detail, and work had been begun upon the structure, when overwork resulted in the illness that caused his death. He was the architect of a large number of country mansions, including Holmewood, Hampshire, and Duncombe House, as well as many costly and elegant town residences. For a long series of years he edited the annual volumes of Spohn's *Architect's Pocket Book*, and he was the author of a considerable number of books, including *Picturesque Architectural Studies*; *Picturesque Examples of Old English Churches and Cottages* (1869); *Town and Country Mansions and Suburban Houses* (1879); and *The Glasgow Municipal Buildings* (1889). From 1891 he was a fellow of the Royal Institute of British Architects.

OHIO, a Central Western State, admitted to the Union in 1803; area (according to the geological survey), 41,060 square miles, of which 300 are water surface. The population, according to each decennial census since its admission, was: 230,760 in 1810; 581,295 in 1820; 937,903 in 1830; 1,519,407 in 1840; 1,980,329 in 1850; 2,339,511 in 1860; 2,665,260 in 1870; 3,198,062 in 1880; 3,672,316 in 1890; and 4,157,545 in 1900. It ranks fourth among the States in point of population. Capital, Columbus.

Government.—The State officers during 1900 were: Governor, George K. Nash; Lieutenant Governor, John A. Caldwell; Secretary of State, Charles Kinney; Auditor of State, Walter L. Guilbert; Treasurer of State, Isaac B. Cameron; Attorney-General, John M. Sheets; Board of Public Works, Frank A. Huffman, Charles A. Goddard, W. J. Johnston; Commissioner of Common Schools, Lewis D. Bonebrake; Judges of Supreme Court, John A. Shauck, Thad A. Minshall, Marshall J. Williams, Jacob F. Burket, William T. Spear, William C. Davis; Clerk of Supreme Court, Josiah B. Allen; Dairy and Food Commissioner, Joseph E. Blackburn.

The term of the Governor, Lieutenant Governor, Treasurer of State, and Attorney-General is two years, beginning in January of the even-numbered years; of the Secretary of State two years, beginning in January of the odd-numbered years; of the Dairy and Food Commissioner two years, beginning in February of the odd-numbered years; of members of the Board of Public Works and Clerk of the Supreme Court three years, beginning in February; of the Commissioner of Common Schools three years, beginning in July; of the Auditor of State four years, beginning in January of even-numbered years; of Judges of the Supreme Court six years, beginning in February. All are elected in November. The Legislature meets biennially in January; there is no limit to length of the session.

Finances.—The total value of the real and personal property in the State, as returned for taxation, was \$1,534,053,228, divided as follows: lands, \$599,678,045; real estate in cities and villages, \$674,525,676; personal property, \$559,849,507.

At the beginning of the fiscal year, Nov. 15, 1899, there was in the treasury \$1,179,492.88. The receipts during the year were \$8,031,817.72, and expenditures \$7,712,567.32, leaving a balance, Nov. 15, 1900, of \$1,498,743.28, credited to the different funds as follows: General revenue fund, \$1,129,050.03; sinking fund, \$207,327.63; common school fund, \$78,145.06; university fund, \$84,220.56.

During the year \$300,000 of the funded debt was paid, leaving the debt at the close of the year \$701,665, of which \$300,000 is due July 1, 1901; \$300,000 July 1, 1902; and the remainder July 1, 1903. The debt bears interest at 3 per cent.

The aggregate local debt is \$96,193,513.94, of which \$77,606,261.40 are municipal debts, and \$10,521,247.58 debts of counties.

Canal Finances.—The expenditures for the State canals during the year amounted to \$220,381.23 and the receipts \$86,779.95. The Legislature appropriated \$134,500. At the end of the year the balance on hand was \$39,148.95.

Educational.—The educational statistics are for the year ending Aug. 31, 1900. The number of pupils enrolled in the public schools was 829,160; number of teachers, 26,017; number of school-houses, 13,073; during the year 222 new school-houses were built. The value of public school property is \$44,017,179. Balance of school fund on hand at the close of the year, \$6,566,046.37.

The report of the Commissioner of Schools shows also 27,327 students in private schools and 7,990 in universities and colleges.

Military.—The total strength of the Ohio National Guard is 5,362, organized in 2 military brigades, comprising 6 regiments of infantry, 4 battalions of infantry, 1 battalion of engineers, 6 batteries of light artillery, and a cavalry troop. There is also a naval brigade of 2 battalions, with headquarters at Cleveland and Toledo.

State Institutions.—The State educational, benevolent, and penal institutions include the Ohio State University at Columbus, Ohio University at Athens, Miami University at Oxford, combined normal and industrial department of Wilberforce University, Ohio Institution for the Blind at Columbus, Ohio Institution for the Education of the Deaf and Dumb at Columbus, Ohio Institution for the Education of Feeble-minded Youth at Columbus, Girls' Industrial Home at Rathbone, Ohio Soldiers' and Sailors' Home at Sandusky, Ohio Soldiers' and Sailors' Orphans' Home at Xenia, Boys' Industrial School near Lancaster, Athens State Hospital, Cleveland State Hospital, Columbus State Hospital, Dayton State Hospital, Longview Hospital at Carthage, Massillon State Hospital, Ohio Hospital for Epileptics at Gallipolis, Toledo State Hospital, Ohio Penitentiary at Columbus, Ohio State Reformatory at Mansfield.

Railroads.—The railroad mileage in 1900 was 8,691, of which 8,132 miles were main line and 559 miles branches and spurs. The earnings, as reported to the Commissioner of Railroads and Telegraphs, were \$86,049,117.88, being an increase of \$13,679,269.20 on the previous year. The Ohio dividends reported aggregated \$6,367,746.04, an increase of \$983,417.39. There were 512 fatal accidents, an increase of 122 over 1899. Of the whole number killed 11 were passengers, 164 employees, 258 trespassers, and 79 travelers on the highway.

Live Stock.—The report of the Auditor, showing the number of domestic stock animals in the State, as returned by the several county auditors, with the changes from the returns of the preceding year, gives these figures: Horses, 711,146, increase 5,949; cattle, 1,427,661, increase 75,943; mules, 14,521, decrease 148; sheep, 2,544,070, increase 26,710; swine, 1,489,518, decrease 80,596.

Legislative Session.—The seventy-fourth General Assembly organized Monday, Jan. 1, and adjourned Monday, April 16, after enacting into laws 556 bills. Among those of general interest were the following.

Putting foreign stockholders in Ohio concerns under the double-liability law.

Relieving Ohio holders of stock in foreign corporations from double taxation.

Permitting the consolidation of lighting companies.

Requiring all private banking institutions to list their property for taxation in the same manner as incorporated and national banks.

Requiring all insurance companies formed on the stock plan to have a capital stock of not less than \$100,000.

Providing that no part of a fire risk shall be renewed in a company not authorized to do business in Ohio.

Supplementing the anti-compact law so as to prevent insurance companies combining for the purpose of controlling agents' rates.

Requiring steam railways to construct suitable waiting rooms at all stations.

Providing for an eight-hour working day.

Creating a State Board of Examiners of Engineers.

Requiring that music be taught in all public schools.

Providing that instruction in the evils of alcohol be given in the public schools.

Providing for the centralization of township schools.

Permitting controlling political committees to purchase voting machines when a majority of the electors voting are in favor.

Granting two hours to factory and mill hands on Election Day to go to the polls.

Regulating the practice of medicine.

Amending the game laws so as to make the open season from Nov. 10 to Dec. 1, and requiring a written permission from the owner of the property.

Providing for the appointment of county game wardens, vested with police powers.

The political complexion of the Legislature was: Senate—Republicans 19, Democrats 11, Independent Republican 1; House—Republicans 62, Democrats 48.

Political.—The Republican State Convention was held at Columbus, April 24 and 25, and the following ticket was nominated: For Secretary of State, Lewis C. Laylin; Supreme Court Judge, John A. Shauk; Member of Board of Public Works, Charles A. Goddard; School Commissioner, Lewis D. Bonebrake; Dairy and Food Commissioner, Joseph E. Blackburn. With the exception of the head of the ticket all these were renominations. The convention also named for State presidential electors Myron T. Herrick and W. P. Orr, and for delegates-at-large to the National Republican Convention, Joseph B. Foraker, Charles Dick, George K. Nash, Charles H. Grosvenor. The platform commended the administration of President McKinley, and declared that:

"It has met an unavoidable war for humanity with unequalled vigor and success, has crowned the matchless triumph of our arms on sea and land with the courageous acceptance of its high and solemn obligations, has faithfully studied and sought equally the true honor of the nation and the greatest good of the peoples who have come under our flag, and has, through the wise use of expanded opportunity, led our country on pathways of greatness and renown.

"We reaffirm the principles in which the Republican party had its birth and on which Abraham Lincoln was elected President, that the representatives of the people have full power over territory belonging to the United States, in harmony with and subject to the fundamental safeguards of our free institutions for liberty, justice, and personal rights. We sustain the President and Congress in exercising this power with due regard for the safety and welfare of the Union, and with the most just, generous, humane, and fraternal consideration for those over whom the authority of the nation is extended. We advocate for them free schools, full security for life, liberty, and property, the most liberal measures for the development of their agriculture and industry, and the largest degree of local self-rule for which they are fitted.

"We recognize in George K. Nash a Governor worthy of our highest confidence and unqualified support. The administration of our State affairs by him and his official associates has been clean, efficient, and commendable, and its policy tending to good government, economy, and wisdom."

The Democratic State Convention was held at Columbus, June 12 and 13, and the following ticket was nominated: For Secretary of State, Henry H. McFadden; Supreme Court Judge, Allen Smalley; Member of Board of Public Works, Peter W. Brown; School Commissioner, Joshua D. Simp-

kins; Dairy and Food Commissioner, Ballard B. Yates. The convention also named for State presidential electors Isaac R. Sherwood and A. J. Warner, and for delegates at large to the National Democratic Convention James Kilbourne, Abraham W. Patrick, William S. Thomas, and Horace L. Chapman. The platform declared:

"We enter our protest against the doctrine that the President or Congress can govern acquired territory outside and independently of the Constitution of the United States, as a doctrine utterly subversive of every foundation principle of our Government. The Declaration of Independence, the flag, and the Constitution must everywhere stand together as emblems of human liberty and equal rights for all, and where one goes all go. We therefore denounce imperialism under any pretense as necessarily leading to militarism, and as wholly foreign to our system of government.

"We denounce the currency law passed by the present Congress, which transfers to the banks the entire control of the paper currency, thus laying the foundation for a money trust. We demand that the General Government shall not only coin the metals, but shall issue and regulate the volume of paper currency also in the interests of all the people.

"We express our deepest sympathies for the Boers of South Africa, who, against such fearful odds, are heroically struggling for that same liberty for which our fathers fought a century and a quarter ago, and which at so much sacrifice they gained and handed down to us.

"We demand also that the unrighteous, unnecessary, and unjust war now being waged for conquest against the Filipinos, who ask only for the right of self-government, be brought to a speedy close by a peace honorable to us and just to them, and in accordance with the principles of the American Declaration of Independence.

"We favor an unfaltering adherence to the Monroe doctrine and oppose entangling alliances, secret or open, with any foreign powers.

"We favor the construction and control by the United States alone of an interocean canal as a commercial highway for all nations.

"We favor the election of the President, the Vice-President, and United States Senators by the direct vote of the people.

"We affirm anew our undiminished faith in the acknowledged leader of our party, William J. Bryan, and demand his nomination at Kansas City for President of the United States, and the delegates elected by this convention are instructed to so cast their votes."

The Socialist-Labor party held no convention, but nominated a full ticket by the referendum, votes having been sent in from more than 50 sections of the party in the State. The ticket was announced by the Executive Committee of the party at Columbus, May 5, as follows: For Secretary of State, Samuel Borton; Supreme Court Judge, Daniel W. Wallace; Member of Board of Public Works, David F. Cronin; School Commissioner, William Garrity; Dairy and Food Commissioner, Otto Steinhoff.

The Prohibition State Convention was held at Columbus, May 25, and put in nomination the following ticket: For Secretary of State, J. Knox Montgomery; Supreme Court Judge, E. Jay Pinney; Member of Board of Public Works, Enos H. Brosius; School Commissioner, Samuel A. Gillett; Dairy and Food Commissioner, Joseph M. Scott. The platform reaffirmed the position of the party against the liquor traffic, and also indorsed woman suffrage.

The Union Reform party placed the following

ticket in nomination: For Secretary of State, Frank Frankenberg; Supreme Court Judge, Lambert B. Logan; Member of Board of Public Works, Rei Rathbun; School Commissioner, William J. Seelye; Dairy and Food Commissioner, William F. Barr.

There was also a Socialist-Democratic ticket, as follows: For Secretary of State, Louis F. Hemse; Supreme Court Judge, Albert Corbin; Member of Board of Public Works, William C. Edwards; School Commissioner, Harry D. Thomas; Dairy and Food Commissioner, William H. Patterson.

The election, Nov. 6, resulted in the success of the entire Republican State ticket, the vote on Secretary of State being as follows: L. C. Laylin, Republican, 543,389; H. H. McFadden, Democrat, 474,078; J. Knox Montgomery, Populist, 9,983; Louis F. Hemse, Socialist-Democrat, 4,650; Frank Frankenberg, Union Reform, 4,647; Samuel Borton, Socialist-Labor, 1,707.

In the presidential election, McKinley received 543,918 votes; Bryan, 474,882; Woolley, 10,203; Debs, 4,847; Ellis, 4,284; Malloney, 1,688; Barker, 251.

OKLAHOMA, a Territory of the United States, organized in 1890; area, 38,715 square miles. The population in 1890 was 61,834; in 1900 it was 398,245. Capital, Guthrie.

Government.—The following were the Territorial officers in 1900: Governor, Cassius M. Barnes; Secretary, William M. Jenkins; Treasurer, Frank M. Thompson; Attorney-General, Harper S. Cunningham, succeeded in March by J. C. Strang; Superintendent of Instruction and Auditor, Stuart N. Hopkins; Adjutant General, Bert C. Orner; Bank Commissioner, John M. Pugh (resigned in July, succeeded by W. S. Search); Superintendent of Public Health, L. H. Buxton; School Land Commissioner, Charles H. Filson; Chief Justice of the Supreme Court, J. H. Burford; Associate Justices, B. F. Burwell, B. T. Hainer, John L. McAtee, and C. F. Irwin. All are Republicans except Judge McAtee, who is a Gold Democrat.

Population.—The Federal census of 1890, giving Oklahoma a population of 61,834, included 12,041 Indians. Add to the figures above given for 1900, embracing only the white population, the 13,873 Indians also returned, and the total population of the Territory is seen to be 412,118. The number of Indians not taxed in 1900 was 5,927. The population of Guthrie in 1900 was 9,981; that of Oklahoma City, 9,976. The other cities having a population of more than 2,000 were: Shawnee, 3,462; Enid, 3,444; El Reno, 3,383; Perry, 3,351; Ponca City, 2,528; Stillwater, 2,431; Kingfisher, 2,301; Blackwell, 2,293; Norman, 2,225.

Finances.—The fifth biennial report of the Territorial Treasurer shows the financial transactions of Oklahoma for the period beginning Dec. 1, 1898, and ending Nov. 30, 1900. The receipts of the treasury for this period were \$1,075,387.01; expenditures, \$726,493.92; leaving a balance on hand, Nov. 30, 1900, of \$348,893.09, as against a balance, Nov. 30, 1898, of \$66,110.79. The delinquent taxes were: 1898, \$26,548.86; 1899, \$29,434.52. Balances from the counties on account of unpaid taxes, Nov. 30, 1900, aggregated \$174,167.65; tax levies for all Territorial purposes for 1900 still to be collected, \$254,094.23.

The assessed valuation of the property of the Territory for 1900 was \$49,338,661. The Territorial tax was 5.15 mills. The bonded debt of the Territory was \$48,000, and the general warranty indebtedness \$379,054.18.

The proceeds from the lease of school lands since the organization of the Territory aggregate

\$1,000,000. The receipts for the last fiscal year were \$189,486.44.

Education.—The last school enumeration was 114,736; number in actual attendance, 85,035; number of teachers in service, 2,191; school districts, 2,000. The tax collected for schools amounted almost to \$750,000.

The total attendance in 1900 at the five Territorial institutions of learning—the University, Normal School, Northwestern Normal School, Agricultural and Mechanical College, and Colored Agricultural and Normal University—was about 1,700. The attendance at the 18 Indian schools conducted by the Government was 2,100.

The enrollment at the university in all departments was 295. The number graduated in 1900 was 14.

At the Agricultural and Mechanical College the enrollment in September had reached 366. The college has two new buildings—a library and a chemical building.

The graduating class of 1900 at the Territorial Normal School numbered 20.

At the Northwestern Normal School the enrollment in September rose to 353. The dedication of the new building of this school, March 8, was marked by elaborate ceremonies.

Additional purchase of land adjoining the tract of the Langston University made that institution in 1900 the possessor of 160 acres of rich tillable soil. The equipment of the farm with machinery, etc., has kept pace with this expansion of its workable area.

Penitentiary.—The Penitentiary contract for Oklahoma with Kansas remained the same in 1900 as in 1899. The report of the warden at Lansing, Kan., to Gov. Barnes gives these details regarding Oklahoma convicts there confined: Number of prisoners on hand, Jan. 1, 1900, 176; number received to Dec. 1, 1900, 109; number discharged to Dec. 1, 1900, 64; number on hand, Dec. 1, 1900, 223; number remanded for new trial, 2; number pardoned, 10; number died, 2.

Social and Religious Conditions.—This topic is treated by the Governor in his annual report as follows: "There are in the Territory about 900 church organizations, with a membership of 70,000, and owning church property valued at \$500,000. There are about 600 fraternal organizations, with a membership of about 25,000. The deaf-mutes and insane of the Territory are cared for in private institutions by contract. There are 50 in attendance at the deaf-mute institution and 283 in the insane asylum. The cost of caring for the insane for the past year was \$67,429.03. During the past year 603,527 acres of Government land were filed on in the Territory by homestead settlers. There are still vacant 5,733,385 acres of Government land. Most of this vacant land is in the western part of the Territory, and adapted more generally to stock raising, although some good agricultural land is still vacant."

Free Homes.—One of the most important events of 1900 to the people of Oklahoma was the passage in Congress of the free homes bill, which passed the Senate May 14, having already been passed in the House. This bill provides for free homesteads on the public lands for actual and bona fide settlers, and reserves the public lands for that purpose. The news of its passage was received in the Territory with great rejoicing. It saves about \$16,000,000 to the people of Oklahoma.

Banks.—In 1900 there were 79 Territorial and 11 National banks in operation in Oklahoma. There had been no bank failure in three years. The resources of the Territorial banks aggregated \$5,147,181.51. Of this, \$2,409,262.85 represented

loans and discounts and \$2,340,250.03 cash in hand. The capital stock of the Territorial banks was \$744,588.66; the surplus and profits, \$483,970.73; deposits, \$3,918,622.12. They had a reserve of 60 per cent. and had gained \$2,419,472.43 in deposits in three years. The national banks had \$1,336,965.34 in loans and discounts, and \$363,300 in Government bonds, their aggregate resources being \$3,098,377.47. Liabilities included \$525 in capital stock; \$40,800 in surplus; \$82,837.08 in undivided profits; \$2,042,295.15 in deposits; \$74,902.13 in United States deposits.

Building and Loan Associations.—There are 6 building and loan associations in the Territory, with an aggregate amount of \$60,000 invested in real estate securities, and paying dividends to their stockholders of from 12 to 20 per cent. per annum.

Insurance.—Forty-six insurance companies do business in the Territory, the aggregate amount of fire insurance written in the year being \$15,274,519.14; premium collected, \$255,425.41; losses incurred, \$62,026.36; losses paid, \$49,663.45. The 15 life insurance companies doing business in the Territory wrote \$4,634,227 of insurance, collected \$102,396.86 premium, and paid \$39,873 in losses. There are 8 bond and surety and casualty companies doing business in the Territory, who collected \$7,748.26 premium on \$1,229,434.65 business in the year, and paid \$643.15 in losses.

Railroads.—There are about 1,000 miles of main-track railway in the Territory, 200 miles having been built during the year. Every county but two is reached by rail. The lines operating in the Territory are the Santa Fé, Rock Island, Frisco, and Choctaw. Much new construction is projected for the near future, 18 railway companies, aggregating \$44,270,000 of capital stock, having been chartered in 1900. The Oklahoma and Southern Railroad Company filed its charter with the Territorial Secretary. The length of this railway is estimated at 400 miles. It will begin at Kiowa, Kan., and pass through Woods, Garfield, Blaine, Kingfisher, Logan, Canadian, Oklahoma, Payne, and Lincoln.

Militia.—In 1900 the Territorial militia greatly improved in strength and organization. For the first time the Oklahoma National Guard grew to a full regiment, well equipped and trained.

Productions.—The wheat crop of 1900 was about 25,000,000 bushels, and the average yield per acre about 19 bushels, while the highest was 50 bushels. Oklahoma, according to the report of the Agricultural Department at Washington, leads all the States and Territories in the estimated yield of cotton to the acre by more than 100 pounds. The estimate for Oklahoma in pounds of lint per acre is 381, Indian Territory ranking next with 280, while Louisiana, Texas, and Arkansas follow in order. The Oklahoma cotton crop of 1900 was 125,000 bales. The yield of oats is estimated at 12,000,000 bushels, the peach and apple crops at about 500,000 bushels each.

Bulletin 45 of the Agricultural and Mechanical College names nearly 750 native plants of Oklahoma.

The number of horses listed for taxation was 243,203; mules, 49,525; cattle, 990,524; sheep, 43,475; swine, 245,431.

There are in the Territory 117 grain elevators, with an aggregate capacity of 1,860,000 bushels.

The geological survey of Oklahoma was begun in 1900, and indications were revealed of mineral wealth in salt, coal, oil, gas, limestone, copper, etc.

Anti-horse-thief Association.—This organization has 199 subordinate lodges and 5,000 members in Oklahoma, reaching into every county.

Memorial.—At Blackwell, Nov. 19, a large gathering of people of the Territory held memorial exercises in a church in honor of Capt. David L. Payne, the original "Oklahoma boomer," who died in 1884.

Political.—The People's party held its Territorial convention in Enid, April 10. A determined bolt divided the convention, and each faction nominated national committeemen and ten delegates—the "regulars" to the Sioux Falls National Convention and the bolters to that at Cincinnati. The resolutions of the "regulars" recognized the call for a national convention at Sioux Falls, S. D., May 9; favored union of all the elements opposed to trusts, imperialism, and monopoly in the interest of the reform candidates in the presidential election and of those in the Territorial elections; reaffirmed adherence to the St. Louis platform of 1896; declared for the initiative and referendum, and for public ownership of public utilities; denounced the Republican party for placing the public money in the hands of banking corporations; regretted the evidence of the Republican administration's sympathy with England in her efforts to crush the Boer republics; deplored the administration's conduct of insular affairs; and pledged loyal support to William J. Bryan.

The Territorial convention of the Republican party was held in Enid, May 10, and transacted its business promptly and without unusual incident. Resolutions were adopted declaring belief in all the principles of the Republican party, approving the national administration, favoring expansion, commending Delegate Flynn and the free-homes measure, and demanding statehood, the creation of a county out of Osage and Kaw Reservations, and the allotment and opening of all the Indian reservations to settlement.

The Democratic Territorial Convention met in El Reno, June 5. This convention resulted in a split, two sets of resolutions and of delegates to the national convention being the outcome. Both factions declared in favor of the nomination of William J. Bryan for the presidency. The platform of the "regular" wing denounced the administration of President McKinley, imperialism, plutocracy, and trusts. It demanded statehood for Oklahoma, and favored the organization of the Osage and Kaw Reservations into one county, to be called Osage County.

At the joint congressional convention of the Democratic and People's parties, which met in Oklahoma City, July 31, Robert A. Neff was nominated for Delegate to Congress. In the platform, anti-imperialism and hostility to trusts were among the most prominent features, the currency legislation of the last Congress was denounced, and free coinage of silver at 16 to 1 demanded.

The Republican Congressional Convention assembled at Guthrie, Aug. 8, and renominated D. T. Flynn for Delegate to Congress. The resolutions approved the Philadelphia platform of 1900; declared that every pledge of the Republican party in 1896 had been fulfilled; congratulated Oklahoma on her prosperity, and especially on the extension of the free-homes policy to the Indian lands; extolled the services of Delegate Flynn; pledged the party to strive for the earliest possible statehood of Oklahoma; declared in favor of standing for all the results of the Spanish War, and of expansion "externally and internally"; commended the appropriation by Congress of \$5,000,000 for the St. Louis exposition; denounced the disfranchisement of citizens in North Carolina in violation of the fourteenth and fifteenth amendments to the United States Constitution; and favored the extension of county rights and government to

the Indian reservations of the Territory and the early opening of all the reservations to settlement.

The antifusion wing of the People's party held their congressional convention in Oklahoma City, Sept. 1, and nominated J. S. Allan for Delegate to Congress. The resolutions affirmed unshaken belief in the cardinal tenets of the People's party as set forth in the Cincinnati platform; approved the nominations of Barker and Donnelly for President and Vice-President; denounced the Republican and Democratic parties as tools of plutocracy, and opposed all entangling alliances with them; favored single statehood for Oklahoma and Indian Territory, and the speedy allotment and opening to settlement of all the Indian reservations in Oklahoma; and opposed any legislation looking toward the sale of the school lands of the Territory.

At the election, Nov. 6, the vote for Delegate to Congress gave Flynn, Republican, 38,253; Neff, Fusionist, 33,539; Tucker, Social-Democrat, 780; Allan, Middle-of-the-Road Populist, 780. Flynn's plurality, 4,714.

To the Council of the Territorial Legislature were elected 7 Democrats, 5 Republicans, and 1 Populist; to the House, 16 Republicans and 10 Fusionists.

OLD CATHOLIC CHURCH. The twentieth Old Catholic Synod of Austria met in Vienna, Sept. 8 and 9. Sixty members and a representative of the Government were present. The number of members was returned as 16,885, against 6,113 in 1882. The accessions since 1898 had been 3,620, of which 1,183 had accrued in the first seven months of 1900. Four new congregations had been organized and four churches built during the year. The moderator spoke of growing friendship between Old Catholics and Protestants. It was represented that the Old Catholic movement was gaining ground in Bohemia, where 17 priests and 2,500 people were ready to join it.

ONTARIO, a province of the Dominion of Canada; area, 222,000 square miles; population in 1891, 2,214,321.

Politics and Government.—The early part of 1900 saw the new Ross Government installed in office. It was composed of the following members: Premier and Treasurer, G. W. Ross; Attorney-General, J. M. Gibson; Commissioner of Crown Lands, E. J. Davies; Commissioner of Public Works, F. R. Latchford; Secretary and Registrar, J. R. Stratton; Minister of Education, R. Harcourt; Minister of Agriculture, J. Dryden; ministers without portfolio, W. Harty and J. T. Garrow. As a reorganization of the previous Hardy Government, which in turn had been a reorganization of the Liberal Government of Sir Oliver Mowat, in power since 1872, it had certain elements of weakness which made the session of 1900 very active. The majority was small, and the Conservative Opposition, under the provincial leadership of Mr. J. P. Whitney, had come very near to success in the elections of 1898. By-elections had gone only slightly with the Government, and Messrs. Latchford, Dryden, Stratton, and Preston were elected, against Brower, McDiarmid, and Robson. The House of Assembly was opened on Feb. 13 by Lieut.-Gov. Sir Oliver Mowat, with a speech from the throne, in which he said:

"The lumbering industry of the province is in a flourishing condition. The legislation of 1898 requiring all pine logs cut under license to be manufactured in Canada took effect first in the season of 1898-'99. The practical operation of this legislation has proved wise and timely. While the quantity of pine timber cut last season showed little if any diminution, compared with previous

years, the sawmilling business of the province, on the other hand, has received a powerful stimulus. Many existing mills have been enlarged, idle ones have resumed work, and new mills have been built and equipped to meet the demand for sawed lumber. In pursuance of the policy of encouraging the development of industries for which the circumstances of the province are specially adapted, an order in Council has been passed that pulp wood cut on Crown lands should be manufactured in Canada. A measure confirming this order in Council will be laid before you.

"The desirability of preserving the forests in districts not adapted for agriculture, so as to constitute a permanent source of timber supply, has been fully recognized in connection with the administration of the Crown domain; accordingly, districts capable of being reforested are being set apart as forest reserves.

"The healthy condition of the mining industry is shown by the growth of revenue from sales and rents of mining lands, the increase of investments in mining enterprises, and a larger output from mines and mining works.

"The agricultural condition of the province is much more favorable than it has been for many years. The great improvement in the quality of all dairy produce has increased the popularity of our butter and cheese in the British market, and has consequently stimulated this branch of industry. Our fruit interests are also increasing in importance and value, as the exports of our orchards for the last year make manifest. The attendance at the Agricultural College has reached the highest limit yet attained, and it will be necessary to provide additional accommodation if the attendance continues to increase as it has during the last few years.

"It is to be noted with regret that the increasing numbers of insane tax the accommodation of our asylums beyond their capacity. Notwithstanding the liberal provision already made and the large expenditure incurred in carrying on these services, it becomes imperative that increased accommodation be provided.

"Measures will be submitted for the improvement of public highways, the drainage of swamp lands, the encouragement of cold-storage stations in rural districts, and the colonization of those portions of northern Ontario best adapted for agricultural purposes. Your attention will be invited to bills respecting the revenue, elections, education, and mining, and also to a measure for a comprehensive exploration of the district between the main line of the Canadian Pacific Railway and Hudson's Bay, in order that more accurate information may be obtained as to its timber and its suitability for farming.

"Your attention is invited to the present relative jurisdiction of the courts of the province and of their respective judges, and to the suggestions of experience for further promoting the efficient, prompt, and inexpensive administration of justice throughout the province."

On Feb. 19 Mr. Whitney led in an onslaught upon the Government, which may be summarized in the following words, giving the Conservative platform as well as denouncing the Government policy:

"The Government has confessed itself unable to deal with financial questions when it appointed a commission to investigate the financial condition of the province. The Government acted indecently in appointing John Hoskin, a Government official, to the commission.

"If the Government is saving money, why not apply it to the removal of the direct taxation

under which the artisan, laborer, and farmer are living?

"Cold storage and transportation are subjects which should properly be considered by the Dominion Government.

"The Government regulations on nickel will discourage the development of that metal, and will make the monopoly of the Canadian Copper Company still more powerful.

"No grant should be given to any railroad company without a provision that in the future, when the company arrived at a paying basis, the grant should be returned.

"The question of the Government ownership of public franchises should be carefully considered.

"A member of the Government should not be at the head of corporations which will gain or lose by Government action, and members of Parliament should be debarred.

"A consultative committee should be appointed to assist the Minister of Education, such committee to be chosen from high school, public school, and separate school teachers.

"The University of Toronto should practically be divorced from the province.

"The pulp-wood policy will strangle the pulp-wood industry.

"The West Elgin Commission is a farce. The people demanded a judicial committee to inquire into the irregularities in all the constituencies.

"Let the Premier dissolve the house and go to the country for a decision."

Mr. Ross, in his reply, defended the appointment of a finance commission, on the ground that the worst should be known, and declared that Mr. Hoskin's appointment was admirable despite the fact of his being a Liberal in politics; declared that under existing conditions of export many of the small products of the farmer went to waste or yielded hardly any profit, while butter and cheese were often spoiled for lack of cold-storage facilities, which he proposed to provide upon a pattern that had proved successful in Australia and New Zealand. Regarding nickel, he declared the policy of the Government to be one of encouraging the local manufacture of the raw material. Large areas of valuable nickel still remained despite the grants to the Canada Copper Company. "Ontario's products for Ontario's sons will be our policy," said the Premier, as he promised a rebate or bounty on every pound of ore refined in the province. In regard to railways, he purposed to introduce legislation by which settlers on the colonization lands of Ontario, as well as their stock and effects, should be carried free. He denied to a great extent the party corruption alleged by his opponents, deprecated the charges made against the Education Department, and opposed the plans proposed by Mr. Whitney. The two speeches which followed may be summarized as including the whole political discussion on both sides during the succeeding session. The first was delivered by Mr. G. F. Marter, a leader of the Opposition, and included the following proposals and remarks:

"The Opposition is willing to co-operate with the Government in an effort to stamp out bribery. The election law should have the following provisions: (a) Deputy returning officers and poll clerks must live in divisions for which they act; (b) deputy returning officers should announce on nomination day the deputies; (c) deputy returning officers and clerks should be in attendance half an hour before the polls, to count and examine the blank ballots; (d) deputies should be forced to issue warrants when called by agents, and constables should detain such men until warrants

are served; (e) any person having a ballot paper outside of the polling booth may be arrested and punished; (f) any minister or candidate who intimates that certain public finances shall follow the election may be unseated and disfranchised; (g) the numbered ballot to be abolished; (h) make it a criminal offense for a license inspector to attempt to intimidate license holders; (i) all offenses to be punished by imprisonment. The Government should not have gone outside of the house to secure a Minister of Public Works. To appoint a committee to investigate the timber wealth of the province. The investigation into the finances of the province should have been postponed until after the award of the arbitration between Ontario and Quebec."

The reply to these suggestions was made by Mr. Andrew Pattullo, a Liberal member of the house. He declared that the Legislature should not deal with nickel and similar questions as party questions. They are business questions, and should be treated as such. The Government should go still further in the control of railways. There was no more danger in a member of the Cabinet being at the head of a financial corporation than if a private member were in the same position. He had an ardent desire to punish the bribers on his side. He would not follow the Premier one minute if he did not believe that he was sincere on this question. He would support any sensible amendment to the election laws, but hoped that the house would not rush off under popular clamor and pass laws which could not be enforced. The true remedy for corruption was to give people something worthy to think about, give them great leaders and great measures. Then people would have more marked convictions; then there would be no corruption. He would like to get farmers from England into old Ontario.

On March 10 Mr. Whitney proposed various changes in the election law, but they were ultimately voted down by the Government. A few days later he presented to the house a sworn statement by a reputable man named Pritchard which appeared to prove distinctly a condition of gross corruption in the constituency of West Elgin, engineered and controlled by a paid gang of Government party men. The dominant public opinion of the province at the time apparently was that the Government were not anxious to punish the perpetrators of undoubted corruption in the constituencies of West Elgin, Brockville, and South Ontario during the provincial elections. The Commission of Inquiry, which was appointed early in the session and was composed of County Court Judges Barron, McTavish, and Morgan, eventually reported in such a way as to clear the Government of any direct share in the actual corruption. Every confidence was felt in the commissioners, but it was known that they had been limited in their powers, and that the chief men connected with the actual bribery and ballot-box stuffing had fled the country.

On March 13 the Government presented to the house details of their agreement with the Spanish River Paper Company, and a grant of 250 square miles of unoccupied and unlicensed public land for cutting pulp wood and erecting mills. It was found that a right of granting cutting privileges in other tracts of country was included, and that in return the company was to expend \$500,000 in erecting a pulp and paper mill within the next three years. In defending the arrangement in the house, on April 10, Mr. Ross said the object of this contract was to promote a very valuable industry in New Ontario. He pointed out that for years the Government had pursued a system of building

colonization roads and otherwise encouraging settlement in New Ontario, and he was pleased to say their efforts had met with good success, as he believed at the next census it would be found that there is now a population of 120,000 in that district. In New Ontario there was a great deal of land, but it was of no value unless developed. Much of this land was of little value from an agricultural point of view, but there were some fertile belts, much timber, and considerable mineral wealth. In 1885 the Government had entered into its first pulp-mill contract with Mr. F. H. Clergue, of Sault Ste. Marie, and the success of Mr. Clergue's undertaking had been most remarkable. In fact, it showed him to be a very remarkable man, and quite justified the Government in the course they had taken. Mr. Clergue had agreed to expend \$400,000 and employ 260 persons. He had already expended over \$2,000,000, and now employs more than 700 persons. Mr. Clergue was now engaged in the building of a railway at an estimated cost of \$6,000,000, but was not asking the public for a cent. It was true that Mr. Clergue asked a certain land grant; but with the completion of the enterprises he had now under construction Mr. Clergue will have expended from \$14,000,000 to \$16,000,000.

Mr. Ross went on to say that the second industry which the Government had endeavored to bring into the country was a pulp mill on Lake Nipigon, but this had fallen through. The next industry of this character was the one on Sturgeon river. This company had a capital of \$1,000,000 and employed 250 persons. The thriving town of Sturgeon Falls had sprung up as a result of the operations of this company, and the district had been greatly benefited. All these contracts, with the exception of the one on Lake Nipigon, had been crowned with success, and all had received the unqualified approval of members on both sides of the house. The fourth contract, he declared, was more favorable to the Government than any of the others. In this the company was limited to the spruce, poplar, and jack pine, while all the hard woods reverted to the Crown. This was an agreement entered into with Canadian capitalists, while the first one had been with Americans.

The agreement was opposed by Mr. Whitney on the ground of favoritism, failure to open these lands and privileges to public competition, and an evident lack of knowledge as to the extent of the resources of the province in connection with its stores of timber and pulp wood. But it was approved by a party vote. Some further discussion took place regarding the duties placed upon Canadian lumber by the United States, and the Ontario Lumbermen's Association declared again in favor of "free logs for free lumber." At their annual meeting, on Feb. 22, the following resolution was passed:

"That the Lumbermen's Association of Ontario express their satisfaction with the provincial Government in putting the manufacturing clause in all licenses; and further, that this association reiterate the opinion, expressed on former occasions, that in the absence of reciprocity in lumber between Canada and the United States the Government of Canada be requested to impose an import duty on lumber corresponding with that imposed by the Government of the United States, and thereby remove any injustice which at present exists to Canadian lumbermen."

On May 1 the Legislature adjourned after a congratulatory speech from the Lieutenant Governor and his assent to the following measures, among many others:

The provincial drainage aid act.

For granting aid to the sufferers by the late disastrous fire in the cities of Ottawa and Hull.

Respecting provincial aid toward the establishment of municipal cold-storage buildings.

Respecting the manufacture of spruce and other pulp wood cut on the Crown domain.

To amend the act to establish forest reserves.

To amend the mines act.

To amend the act respecting cheese and butter manufacturing associations and companies.

To provide for the incorporation of co-operative cold-storage associations.

To amend the loan corporations act.

Respecting aid by land grant to the Algoma Central Railway Company.

Respecting certain subsidies granted to the Manitoulin and North Shore Railway.

Authorizing municipal and other grants for the benefit of Canadians on military service in South Africa.

To permit municipalities to use voting machines.

To amend the act respecting brewers' and distillers' and other licenses.

To amend the Ontario shops regulation act.

To amend the act for the prevention of accidents by fire in hotels and other like buildings.

To amend the act to preserve the forests from destruction by fire.

To amend the San José scale act.

For the prevention and destruction of certain noxious insects.

To amend and consolidate the Ontario game protection act.

Respecting municipal sanitaria for consumptives.

Finances.—On March 6 the report of the Finance Commission, composed of Messrs. John Hoskin, Q. C., Byron E. Walker, and Angus Kirkland, was submitted to the house, and it set at rest in great measure the long-standing dispute between Government and Opposition as to what did and what did not constitute provincial assets. According to this statement, the assets of the province on Oct. 31, 1899, included bank balances and special deposits of \$597,526.38; funds held by the Dominion in behalf of Ontario, upon which interest at 5 per cent. has been settled and is paid, \$4,758,135.13; common school fund of preconfederation period held by the Dominion in trust for Ontario, and paying 5 per cent., \$1,479,656.10; miscellaneous Dominion securities, \$305,100.69—a total of \$7,140,418.22. The liabilities included \$2,000,000 as a balance of account current with the Dominion and a capitalization of certain Indian tribal bounties due by the old province of Upper Canada (now Ontario) and assumed by the Dominion; the present value of certain annuity payments and railway certificates, \$3,117,714.90; miscellaneous sums, \$14,830.03—total, \$5,132,544.93. This left a surplus of assets over liabilities of \$1,957,873.29, instead of the \$4,000,000 or \$5,000,000 which the Government had claimed for two decades.

On March 8 the Hon. G. W. Ross delivered his first budget speech as Treasurer in the reorganized Government. As illustrating the conflict of opinion and statement regarding the finances of the province, it may be said that two days after the commissioners reported the Treasurer varied his figures from theirs and gave the assets of the province as \$7,368,917 and the liabilities as \$5,117,986. The receipts for 1899 were announced as \$4,096,494, the expenditures as \$3,710,420, leaving a surplus of \$386,074. The estimated revenue for 1900 was \$5,019,682, and the estimated expenditure \$3,723,292. The chief items of revenue in 1899 were: Crown lands, \$87,286; rent, \$111,

169; woods and forests, \$1,092,848; liquor licenses, \$373,803; succession duties, \$150,111; public institutions, \$97,432. The increase over the revenue of 1898 was \$449,141. The final division upon the Treasurer's statement and financial proposals showed a Government majority of 7 votes.

Licenses and Temperance.—In 1874 there were 4,793 tavern licenses in Ontario; in 1899 there were 2,841. Concurrently with the curtailment in the number of licenses there had been apparently a lessening of drunkenness. The average yearly commitments for drunkenness in the five years from 1876 to 1880 inclusive was 3,812; from 1881 to 1885 it was 4,016; from 1886 to 1890, 4,311; while from 1891 to 1895 it was only 2,703. During the Scott act period, from 1881 to 1890, the average yearly commitments for drunkenness exceeded 4,000, while under the restrictive license system prevailing since then the commitments have only averaged 2,703 per annum.

Crime.—An interesting report was the one prepared by the Inspector of Prisons and Reformatories. In 1899, 8,203 persons were committed to the jails. This was the lowest number in twenty-six years. In 1898, 8,256 persons were committed. Of those committed last year, 6,846 were men, 1,057 were women, 267 were boys under sixteen years of age, and 33 were girls. There was a decrease in crimes against public morals from 354 in 1898 to 247 in 1899. Committals for crimes against the person numbered 638 in 1899, being a decrease of 11 compared with the year previous. For drunkenness, 1,892 people were committed, while the number in 1898 was 1,707. Seven people were committed for bigamy, and 1,428 were sent to jail for vagrancy. Of the total of 8,203 committals, there were brought to trial and discharged 1,584. By order of the judge, 806 were let go. The remainder, 5,034, were sentenced or kept for some reason or other. To jail 4,060 of those guilty were sentenced, while 613 went to prison and 133 to Kingston and the reformatories. By the report it is seen that 3,297 of those sentenced were temperate, and 6,855 of the total number of 8,203 could read and write. The total cost of the jails last year was \$136,617, while in 1898 the cost was \$137,310. The average cost per patient was 20½ cents a day. During 1898 there were committed 389 lunatics and idiots.

Education.—The financial condition of the University of Toronto, which is in some measure subsidized and controlled by the province, came in for considerable discussion during the year. The Hon. Edward Blake, M. P. (now living in England), resigned the chancellorship which he had held for many years, as did the Hon. William Mulock the vice-chancellorship. Sir W. R. Meredith, Chief Justice of Ontario, and Mr. Justice Charles Moss were elected unanimously to be their successors. The income of the university last year was \$127,445.59, of which the larger items were: Interest on purchase moneys, \$566.83; interest on loans, \$20,507; interest on debentures, \$11,896.87; rents, \$17,209.57; city of Toronto grant as rent for Queen's Park, \$6,000; legislative grant, \$7,000; wild land sales, \$8,191.81; interest on advances to Upper Canada College, \$7,658.92; university and college fees, \$44,441.35; gymnasium fees, \$909. There was a deficit for the current year of \$20,000.

The latest official figures available regarding general education in Ontario are those of 1898, in the annual report of 1899. They show 5,932 public schools, 478,394 pupils registered, an average attendance of 273,451, 6,466 female teachers, 2,743 male teachers, receipts of \$5,219,444, and expenditures amounting to \$4,392,714. The Roman Catholic separate schools numbered 343, the pupils

41,667, the average attendance 25,671, the receipts \$389,185, the expenses \$349,481. The high schools, standing between the public schools and the universities, had 571 teachers, 23,301 pupils, with receipts amounting to \$779,451 and expenses to \$729,009, and showed 130 schools, with an average attendance of 14,066.

Agriculture.—The assets of the farmers of Ontario in 1899 were given in the Annual Report of the Bureau of Statistics as follow: Land, \$563,271,777; buildings, \$213,440,281; live stock, \$115,806,455; implements, \$54,995,857. The total was \$847,513,360. The following is the value of crops produced on the farms of Ontario in 1899: Hay and clover, \$27,010,003; oats, \$24,901,670; fall wheat, \$9,631,365; peas, \$5,675,673; potatoes, \$6,538,144; barley, \$5,858,202; turnips, \$5,807,839; spring wheat, \$4,682,476; husking corn, \$4,291,300; silage or fodder corn, \$3,395,510; mangolds, \$1,671,871; rye, \$1,142,423; buckwheat, \$2,501; beans, \$703,090; carrots, \$459,254; total, \$104,771,321. Besides this, there were fruits, wool, honey, and orchard produce. The value of these articles is estimated at \$4,000,000. The following is the value, as stated by the same authority, of the live stock, sold or slaughtered, from Ontario farms in 1899: Cattle, \$17,303,426; hogs, \$14,157,394; horses, \$3,204,006; sheep, \$2,629,201; poultry, \$1,162,991; total, \$38,457,018.

Mines.—The gold produced in Ontario in nine months of 1899 was 20,210 ounces; silver, 98,000 ounces; nickel, 4,608,000 pounds; copper, 4,642,000 pounds; pig iron, 48,216 tons. The rush to incorporate mining companies in 1897, which resulted in 140, with a capital of \$101,531,000, was not maintained in 1898. The total number in the latter year was 49, with a capital of \$30,762,998. There were 19,529 acres of land sold for mining in 1898, 48,911 acres leased, \$9,429 paid in rentals. The revenue derived by the Government for sales and rentals in the year ending June 30, 1899, was \$109,140. The total mineral production of 1898 included \$2,328,110 for oil, gas, and carbide, and \$282,886 for salt and gypsum. The number of employees was 7,495, and the wages paid were \$2,464,239. The iron industry continued to prosper in 1898 and 1899. Large blast furnaces were established in Hamilton and Deseronto.

ORANGE FREE STATE, a republic in South Africa, founded by Boers who emigrated from Cape Colony in 1836 and 1837, recognized as independent in 1854, occupied in March, 1900, by a British army commanded by Lord Roberts, and formally annexed under the name of the Orange River Colony, although the burghers remained under arms to maintain their independence. The President of the republic is M. T. Steyn, elected Feb. 19, 1896. The legislative assembly, called the Volksraad, has 60 members, elected for four years by the burghers, who are white male citizens born in the country or residents for three years, owners of property or leaseholders, or having an income of £200.

Area and Population.—The area is estimated at 48,326 square miles. The white population was 77,716 in 1890, composed of 40,571 males and 37,145 females, 51,910 of the total number having been born in the Free State, and 21,116 in Cape Colony. The number of natives was 129,787. Bloemfontein, the capital, had 2,077 white inhabitants and 1,302 natives. There has been considerable immigration from Germany and England. The number of illiterates at the time of the census was 23,722, including 19,508 children under seven. There were 199 Government schools in 1898, with 293 teachers and 8,157 pupils, and 42 State-aided private schools with 753 pupils.

Finances.—Jan. 1, 1897, the State took over the railroad built by the Government of Cape Colony through the republic, connecting with the Cape system at Norval's Point, on the Orange river, passing through Bloemfontein, and connecting with the Transvaal railroads at Viljoens drift over the Vaal river. The net receipts from the railroad in 1898 were £408,578, increasing the Government revenue to £799,758, other items being £32,782 from posts and telegraphs, £27,935 from transfer taxes, £15,428 from quit rents, £121,411 from import duties, £63,981 from stamps, and £19,686 from the native poll tax. The expenditure in 1898 was £956,752, of which £508,478 was railroad expenditure, while salaries amounted to £56,527, police expenses to £14,182, cost of education to £54,531, postal and telegraph expenses to £30,142, expenditure on public works to £37,270, and artillery to £10,729. The Government had a debt of £30,000 prior to the acquisition of the railroads. This operation involved the payment to the Cape Government of £1,800,000. The length of the railroads is 392 miles, built at the cost of £2,771,945. The telegraphs have a length of 1,480 miles, with 1,700 miles of wire, besides 420 miles of railroad telegraphs, with 1,119 miles of wire.

Defense.—Every able-bodied man is liable to be called out for the defense of the republic from the age of sixteen to that of sixty. In 1899 there were about 22,000. Four batteries of artillery were stationed at Bloemfontein, numbering 150 officers and men, with a reserve of 550 passed artillerists.

Commerce and Production.—There are 10,500 farms in the Free State, containing 30,000,000 acres, of which only 250,600 acres are cultivated. The live stock consisted of 248,878 horses, 276,073 oxen, 619,026 other cattle, 6,619,992 sheep, 858,155 goats, and 1,461 ostriches. Diamonds were dug in 1898 of the value of £1,508,661. Grain, wool, and horses are imported from Basutoland, and the exports consist of pastoral and agricultural produce shipped to Cape Colony, Natal, and the South African Republic, and general merchandise for Basutoland, and diamonds exported by way of the Cape. The value of the commerce with the conterminous countries in 1898 was as follows:

COUNTRIES.	Imports.	Exports.
Cape Colony	£849,540	£820,467
Natal	234,029	147,177
Basutoland	68,708	45,492
South African Republic	48,655	910,299
Total	£1,190,932	£1,923,425

OREGON, a Pacific coast State, admitted to the Union Feb. 14, 1859; area, 94,560 square miles. The population was 13,294 in 1850; 52,465 in 1860; 90,923 in 1870; 174,768 in 1880; 313,767 in 1890; and 413,536 in 1900. Capital, Salem.

Government.—The following were the State officers in 1900: Governor, Theodore T. Geer; Secretary of State and Auditor, Frank I. Dunbar; Treasurer, Charles S. Moore; Attorney-General, R. D. N. Blackburn; Superintendent of Instruction, J. H. Ackerman; Adjutant General, C. U. Gantenbein; Food Commissioner, J. W. Bailey; Game and Forest Warden, L. P. W. Quimby; Land Agent, L. B. Geer; Fish and Game Protector, F. C. Reed; Printer, W. H. Leeds; Printing Expert, Ross E. Moores; President of the State Board of Agriculture, W. H. Wehrung, and of that of Horticulture, H. B. Miller, who resigned and was succeeded in April by E. L. Smith; Biologist, F. L. Washburn; Librarian, James B. Putnam; Chief

Justice of the Supreme Court, Charles E. Wolverton; Associate Justices, Robert S. Bean and Frank A. Moore; Clerk, J. J. Murphy—all Republicans.

The term of the State officers is four years, and they are elected in June of even-numbered years, alternating with the presidential elections. In June of all the even-numbered years members of Congress, the Legislature, and a justice of the Supreme Court are elected. The Legislature meets in January of the odd-numbered years. It consists of 30 Senators and 60 Representatives.

Population.—The population of the State has increased in the past decade 99,769, or 31.7 per cent. Following is the population by counties: Baker, 15,597; Benton, 6,706; Clackamas, 19,658; Clatsop, 12,765; Columbia, 6,237; Coos, 10,324; Crook, 3,986; Curry, 1,868; Douglas, 14,565; Gilliam, 3,201; Grant, 5,946; Harney, 2,596; Jackson, 13,698; Josephine, 7,517; Klamath, 3,970; Lake, 2,847; Lane, 19,604; Lincoln, 3,515; Linn, 18,603; Malheur, 4,203; Marion, 27,713; Morrow, 4,151; Multnomah, 103,167; Polk, 9,923; Sherman, 3,447; Tillamook, 4,471; Umatilla, 18,049; Union, 16,070; Wallowa, 5,538; Wasco, 13,177; Washington, 14,467; Wheeler, 2,443; Yamhill, 13,420.

Portland has 90,426 inhabitants; in 1890 it had 46,385. Salem has 4,258.

Finances.—The semiannual report of the Treasurer shows that the balance on hand July 1 was \$1,080,944.01; the receipts to Jan. 1, 1901, were \$785,279.08; total, \$1,866,223.09. The disbursements were \$921,599.69, leaving at the close of the year a balance of \$944,623.40. The receipts of the general fund were \$245,145.43, and the disbursements \$323,233.67. The receipts of the common-school fund were, principal \$330,043.72, and interest \$113,524.92; the disbursements from the principal \$270,107.58, and from the interest \$235,780.49. The receipts in the first half of the year, including a balance from 1899 of \$741,316.43, were \$1,850,041.94, and the disbursements were \$769,097.93.

Valuations.—The gross valuation of taxable property is given as \$125,738,761.13; the exemptions amount to \$7,933,887; making the amount to be taxed \$117,804,874.13. The amount of the next State tax, which is to be based on this valuation, is \$671,487.78. The tax rate will be 5.7 mills.

The number of acres of tillable land is 2,692,458, their value \$24,258,795; acres of nontillable land 12,370,543, value \$20,784,600; miles of railroad bed 1,672.96, value \$5,217,229; horses and mules 164,986, value \$2,575,379; cattle 386,431, value \$4,993,885; sheep 1,458,098, value \$2,205,874.

Education.—The report of the superintendent shows the following figures: School population—between four and twenty years—133,181; enrollment, 89,405; average daily attendance, 64,411; number of teachers, 3,742; of schoolhouses, 2,070. There are 243 graded schools, employing 1,026 teachers and giving instruction to 40,791 pupils. Statistics of 1899 show that there were 31 universities, colleges, and academies, with 270 teachers and 4,783 pupils. In 1900 there were 42 of these institutions. The apportionment of the school fund interest in August was the largest ever made—\$207,457.34. The whole cost of public education in 1900 is given as \$1,598,825.53.

The Agricultural College had 405 students in December, and graduated 37 in June. In July the Board of Regents prohibited the participation of the students in intercollegiate contests. The preamble to the resolution gives the reasons:

"Whereas, Intercollegiate athletic games have passed the bounds of reason and developed into a form of mania that is demoralizing to the moral,

mental, and physical well-being of college students; and

"Whereas, The records of all educational institutions show that the standing of those students engaged in athletics compares in nearly all cases unfavorably with the standing of other students; and

"Whereas, The same overtaking of strength and endurance in dumb brutes that is visited upon athletes is made a misdemeanor, punishable by statute law; and

"Whereas, The doings of the few athletes absorbs the attention and demoralizes the studies of the whole body of students for long periods, to the utter prostitution of the purposes for which colleges of agriculture and mechanics were beneficently endowed; therefore," etc.

The available funds of the college were \$83,317.68, and the expenditures \$89,964.01.

The State University, at Eugene, has 8 colleges and schools, namely, the graduate school; college of literature, science, and the arts; college of engineering—civil, electrical, mining, mechanical, or municipal; school of political science and history; school of mines; school of pharmacy; school of law; school of medicine. There are 29 departments and 150 courses of instruction, aside from the schools of law and medicine. Many of the departments offer both preparatory and collegiate courses. In June the degree of B. A. was conferred on 11 students, 15 were made bachelors of law, and 11 doctors of medicine.

Graduates at other institutions were: Monmouth Normal School, 24; Ashland Normal School, 12; McMinnville College, 3; Pacific College, at Newberg, 5; Philomath College, 5; Pacific University, at Forest Grove, 10; Albany College, 9; Willamette University, at Salem, 6 in the collegiate department. Columbia College, at Milton, was dedicated Sept. 18.

The text-books for the public schools are hereafter to be selected by a commission of 5 members, who hold office four years after appointment by the Governor. In February, 1901, and every six years thereafter, a circular is to be sent to publishers of schoolbooks, asking for proposals for furnishing books for the ensuing six years. From these the commissioners are to select and report to the State Board of Education, which is then to make the contracts. Each commissioner is to receive \$100 for attendance at the meeting and 10 cents for each mile traveled. The Governor appointed five men to serve, but one declined, leaving H. W. Scott, P. L. Campbell, W. M. Ladd, and W. M. Colvig as appointees.

The question of the right of a teacher in a public school to read from the Bible and repeat the Lord's Prayer in school, and to compel pupils to rise and listen to the prayer, came before the Attorney-General for an opinion. He decided that the majority of the trustees of any school have the right to prescribe such exercises and compel respectful attention on the part of pupils.

Charities and Corrections.—The Insane Asylum had 1,160 patients Dec. 1, 1898; during the biennial term 679 were admitted, 32 escapes were returned, 217 were discharged recovered, 100 were discharged much improved, 65 discharged improved, 40 discharged not improved, 2 not insane. 224 died, and 50 escaped, leaving, Nov. 30, 1900, 1,173, of whom 821 were men. The monthly average was 1,166. The financial statement for the term shows that the total expenditures for articles consumed was \$148,461.99; total pay roll, \$131,710.74; pay of Board of Trustees and clerks, \$133.33; grand total, \$281,506.06.

The biennial report of the State School for the

Blind shows that during the term ending in December 34 pupils were enrolled, the present attendance being 20. The expenditures of the term were \$17,578.60.

In the two years 82 pupils were enrolled in the State School for Deaf-mutes, and 60 were in attendance at the close of the year. The total expenditures were \$13,574.59 for 1899 and \$13,183.03 for 1900, or a total of \$26,757.62 for the biennial term. Taking 60 pupils as the average attendance, it will be seen that the per capita cost per year is \$222.98, or \$18.58 per capita per month, allowing twelve months per year. The pupils go home during the summer, so that the expense is really about \$22.30 per capita per month during the time the school is in session.

The State Soldiers' Home is full, and many applicants have to be turned away. Some of these gain admission to the National Home. The last appropriation was \$20,000 for the two years, and this was exhausted and a deficit of \$10,751.71 was incurred.

The number of boys at the State Reform School at the beginning of the biennial term was 99. At the end of the term 131 were enrolled, the average having been 113. The total expenditures for the term were \$48,734.15, of which \$35,574.99 was for general maintenance, \$10,429.73 for improvements, and \$2,729.43 for lighting. Since the institution was established 443 boys have been received.

The convicts at the Penitentiary at the close of the year numbered 278. Of the appropriations, aggregating \$99,946.20, there has been expended \$97,541.17, leaving balances aggregating \$2,405.03. Early in 1899 work was begun in the brickyard, and 1,100,000 brick have since been burned. Convicts also work in the stove foundry and on public roads.

Militia.—The organized strength of the militia amounted in July to 1,433 men, while the number available for military duty was 59,896. The War Department has allowed 84 per cent. of the State's claim for equipment and supplies furnished the Oregon volunteers when they entered the United States service; some of the equipment was worn, and therefore the whole claim was not allowed. The naval battalion is to have from the Government a small cruiser and the loan of a 12-oar cutter and 2 rapid-fire 3-inch naval guns.

Game.—The Game Warden says: "The history of the past two years demonstrates the wisdom of the law passed in 1898 protecting elk for ten years. Even the violations by Indians have been greatly held in check, owing to the vigilance of the fire wardens. Elk are most plentiful in the Cascade mountains, where one deputy reported seeing a band of 80 to 100, while another counted 27 elk in one band.

"Deer are yet plentiful in Oregon, and, although many violations of the law are reported, it is extremely difficult to secure convictions. Indians are the most dangerous enemy to the deer, as they have very little regard for State laws.

"Nearly all upland birds are more plentiful this year than ever. This was especially true of the ringneck, or China torquatus pheasant, which has obtained such a firm foothold in the State that its extermination is not to be thought of.

"English partridges will shortly be introduced into the State, a shipment of 100 pairs being en route to Oregon from England."

Pheasant farming is now a recognized industry in the State.

Products.—Following are the statistics of the products of the farm, orchard, and range in the State in 1900: Wheat, 16,000,000 bushels, \$8,640,000; corn, 282,547 bushels, \$141,273; oats,

3,583,062 bushels, \$1,361,563; hay, 1,506,316 tons, \$10,544,212; potatoes, 1,545,669 bushels, \$494,614; wool, 20,000,000 pounds, \$2,500,000; hops, 16,000,000 pounds, \$2,140,000; barley and rye, 1,100,000 centals, \$825,000; mohair, 187,500 pounds, \$51,362; vegetables, hemp, etc., \$500,000; fruit, \$2,000,000; sales of stock, \$10,500,000; butter, cheese, and milk, \$5,113,013; poultry and eggs, \$4,750,000; total, \$49,561,037.

The products of the mines were: Gold, \$3,770,000; borax, \$100,000; silver, \$15,000; coal, 90,000 tons, \$720,000; total, \$4,155,000.

The fisheries produced: Columbia river salmon pack, 358,722 cases, \$2,282,295.10; salmon pack, Oregon coast streams and bays, 73,800 cases, \$323,321.60; fish consumed locally and shipped abroad, 5,580,138 pounds, \$374,967; shellfish, \$47,388; total, \$3,027,971.70.

The manufactured goods, including lumber, were estimated at a value of \$60,000,000.

Portland.—The foreign commerce of Portland for the year ending Nov. 30 was: Imports, \$1,476,801; exports, \$8,524,882. The business of Portland's jobbing trade amounts to \$110,000,000, and the bank clearings to \$106,926,536. A mining stock exchange was incorporated in February.

Land.—The annual report of the General Land Office shows that in the six land districts of the State entries were made covering an area of 840,975 acres, for which \$326,791 was turned in. The heaviest sales were of timber and stone lands. There are now 34,377,907 acres of unappropriated and unreserved land in the State, of which 23,489,861 acres are surveyed. The reserves are the Cascade Range Forest Reserve, 4,492,800 acres; Bull Run Reserve, 142,080 acres; Ashland Forest Reserve, 18,560 acres. The amount of timber in the State, as estimated by Henry Gannett, is 234,653,000,000 feet.

The biennial report of the State Land Department shows that the receipts for the two years ending Dec. 31, 1900, were 66 per cent. higher than those for the two years preceding. The receipts for 1899-1900 aggregated \$562,081, as against \$351,586.68 for the years 1897-'98. According to the State Land Agent, on April 1, 1899, the State owned 179 farms, which were secured upon foreclosure of mortgages given to secure loans from the trust funds of the State. These farms aggregated 49,514 acres, and represented loans to the amount of \$293,395. Since that date the State has secured by similar foreclosures 35 farms, with a total of 8,682 acres, through loans amounting to \$57,000.

From this land 88 entire tracts have been sold for \$181,958.71. The cost of those sold was \$160,599.17.

The receipts of the office of State Land Agent were as follow: From tracts sold, \$181,958.71; from partial sales, \$2,781.75; from rents, \$16,043.41; total, \$200,783.87.

The Scalp Bounty.—Multnomah County refused to levy a tax for the scalp bounty fund in accordance with the law of the last Legislature. Other valley counties, though having few sheep to protect, observed the law. The 10 counties that have comparatively few sheep and goats have a total taxable property of \$76,073,388. The 10 stock counties have \$20,231,344. The whole tax, if levied, would be \$30,290; Multnomah's share would be \$7,915. Nearly 50,000 scalps have been brought to the county courts within two years; it is estimated that 47,000 were those of coyotes; the others, wild cats, cougars, mountain lions, and timber wolves.

Political.—At the State election, June 4, a justice of the Supreme Court, a dairy and food

commissioner, the two members of Congress, and the Legislature were elected. Five proposed constitutional amendments were submitted to vote. For the State offices nominations were made by the Republicans, the Prohibitionists, and the Democratic and People's party combined.

The Republican convention, April 12, named the following ticket: For Justice of the Supreme Court, C. E. Wolverton, renominated; Food and Dairy Commissioner, J. W. Bailey, renominated.

The platform commends the Republican Congress for making the gold standard a part of the statutory law of the land, and says: "So long as either of our great political parties advocates the free coinage of silver, the maintenance of the gold standard is the most important political issue, affecting as it does the value of the farmer's crops and the laborer's wages."

On the question of expansion the platform says: "We indorse the policy of the administration in securing the Philippine Islands and suppressing the insurrection there, and demand that they shall be retained as American territory. We regard trade with the Orient as one of the great sources of our national wealth in the future, and an open door in China as an important aid to the growth of our trade in the Orient."

The resolutions favor the immediate construction of the Nicaragua Canal under governmental control.

On the subject of trusts the platform says: "We recognize the vital necessity of control of the organization and curtailment of the powers of trusts and combinations of capital by the State, and pledge its support in the approaching Legislature of laws defining and carrying out these objects."

At Portland, the same day (April 12), the Democratic and the People's party held their conventions. There was a contest in the Populist convention over the question of fusion with the Democrats, and the fusion element was finally victorious. The following are the nominations: For Justice of the Supreme Court, William Ramsey, Democrat; Food and Dairy Commissioner, William M. Schulmerich, People's party.

The fusion platform reaffirms in its entirety the Chicago platform of 1896 and the money plank adopted by the fusionists of Oregon in 1898, which declared for the free and unlimited coinage of silver at the ratio of 16 to 1. The platform favors an income tax, the election of United States Senators by direct vote of the people, and the initiative and referendum, and opposes "government by injunction."

On the Philippines it says: "The Filipinos can not be citizens without endangering our civilization; they can not be subjects without endangering our form of government. We favor an immediate declaration of the nation's purpose to give to the Philippines, first, a stable form of government; second, independence; and third, protection from outside interference. We favor the expansion of trade by every legitimate and peaceful means, but we are opposed to purchasing trade at the cannon's mouth with human blood."

The Middle-of-the-Road Populist convention, with 9 delegates present, nominated a ticket and elected 17 delegates to the National Convention at Cincinnati.

The Prohibitionists, in convention, April 10, in Portland, named the following: For Supreme Judge, C. J. Bright; State Food and Dairy Commissioner, P. L. Kenady.

A platform in accordance with the principles of the party was adopted, and supplementary resolutions were passed denouncing the administration for permitting the army canteen and protecting

the liquor business in Cuba, Porto Rico, and the Philippines.

The Republican candidates were successful at the polls. For Justice of the Supreme Court, Wolverton, Republican, received 44,025 votes; Greene, Democrat, 33,388; Bright, Prohibitionist, 4,537. On joint ballot the Republicans will have a majority of 20—10 in each House.

All the five proposed constitutional amendments were rejected. They were as follow: 1. To allow any county, city, town, school district, or other municipal corporation to become indebted to an amount not exceeding 5 per cent. of the value of its taxable property, the present limit being \$5,000, except in cases of insurrection or invasion. 2. Increasing the number of judges of the Supreme Court from 3 to 5. 3. Permitting negroes to reside in the State. 4. To confer the right of eminent domain upon irrigation and drainage companies, and to declare the "right to collect taxes or compensation for the use of water" a "franchise." 5. Giving women the right of suffrage. The proposition to repeal the constitutional provision in regard to negroes residing in the State, which is a dead letter, since it is nullified by the United States Constitution, was rejected by a very small majority—19,074 for and 19,999 against. The woman suffrage amendment was rejected by a vote of 26,265 for to 28,402 against. The vote on the others showed majorities against them of about 10,000.

The vote on presidential electors in November stood: McKinley, 46,526; Bryan, 33,385; Woolley, 2,536; Debs, 1,466; Barker, 203.

OSTEOPATHY (from *ostion*, bone, and *pathos*, suffering), a method of treating diseases of the human body without the use of drugs, by means of manipulations applied to various nerve centers, chiefly those along the spine, with a view to inducing free circulation of the blood and lymph, and an equal distribution of the nerve forces. Special attention is given to the readjustment of any bones, muscles, or ligaments not in the normal position.

The system was formulated in 1874 by Dr. A. T. Still, a physician of Baldwin, Kan., who, having become dissatisfied with the results attained through the practice of medicine, determined, if possible, to discover a more natural and efficacious method of healing. He reasoned that a body so perfectly constructed mechanically should be able to protect itself against the inroads of disease without the artificial aid of external substances, except those employed as food. His next conclusion was that "a natural flow of blood is health, and disease is the effect of local or general disturbance of blood." With this as a working hypothesis, he made a series of experiments, the results of which convinced him that the various organs of the body were controlled by nerve centers located chiefly along the spine, and that these could be operated upon and controlled by pressure or stimulation of the fingers. He holds also that if the bones, muscles, arteries, veins, lymphatics, glands, organs, and tissues of the body are in their correct anatomical positions, disease can not exist. Displacement may arise from a variety of causes, such as a fall, a blow, a strain, or atmospheric changes. Pressure upon the blood vessels or nerves in the immediate vicinity of the part so affected will follow, and a consequent shutting off of the nerve or blood supply to some organ, which will then become diseased. With a readjustment of the displaced part will come "perfect freedom of motion of all the fluids, forces, and substances pertaining to life, thus re-establishing a condition known as health."

Osteopathy does not confine itself to a treatment of maladies of the bones, nor does it find in diseased bones the origin of all pathological conditions. The name was considered by Dr. Still as applicable to his system because of the relative importance which his theory gives to anatomy, and because of his belief that "the bones could be used as levers to relieve pressure on nerves, arteries, and veins."

Treatments, which do not as a rule occupy more than twenty minutes, are given through thin garments, and not, as in massage, upon the bare flesh. No machines or appliances are used.

The first institution for the training of practitioners in osteopathy was opened about seven years ago in Kirksville, Mo., under the name of the American School of Osteopathy. Since then a considerable number have been established in different parts of the United States, the most prominent being the Northern Institute of Osteopathy at Minneapolis, the Boston Institute of Osteopathy, the Philadelphia Institute of Osteopathy, the Still College of Osteopathy at Des Moines, Iowa, the Pacific School of Osteopathy at Los Angeles, Cal., and the Milwaukee College and Infirmary of Osteopathy. Several of these colleges publish periodicals in the interest of osteopathy.

The prescribed course of study covers a period of four terms of five months each. The requirements for admission are an elementary knowledge of English, arithmetic, physics, and the history and geography of the United States. The curriculum includes, in addition to the theory and clinical demonstration of osteopathy, descriptive and demonstrative anatomy, histology, chemistry, physiology, hygiene, pathology, physiological psychology, dietetics, obstetrics, and minor surgery. Upon satisfactory completion of the course, students receive the degree of doctor or diplomate in osteopathy.

It is estimated that there are about one thousand persons practicing osteopathy in the United States. Among the complaints which they say they have treated successfully are heart and lung diseases, nervous prostration, sciatica, lumbago, all forms of neuralgia and paralysis, asthma, catarrh, incipient consumption, spinal curvature, eye and ear affections, and all dislocations, liver, kidney, stomach, and intestinal affections.

The following States have by legislative action placed osteopathy upon the same legal basis as the recognized schools of medicine: Vermont, Missouri, Iowa, Illinois, Michigan, Tennessee, North and South Dakota, Ohio, Texas, Colorado, Kansas, and California.

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PENNSYLVANIA, a Middle State, one of the original thirteen, ratified the Constitution Dec. 12, 1787; area, 45,215 square miles. The population, according to each decennial census, was 434,373 in 1790; 602,365 in 1800; 810,091 in 1810; 1,047,507 in 1820; 1,348,233 in 1830; 1,724,033 in 1840; 2,311,786 in 1850; 2,906,215 in 1860; 3,521,951 in 1870; 4,282,891 in 1880; 5,258,014 in 1890; and 6,302,115 in 1900. Capital, Harrisburg.

Government.—The following were the State officers in 1900: Governor, William A. Stone; Lieutenant Governor, J. P. S. Gobin; Secretary of the Commonwealth, William W. Grist; Secretary of Internal Affairs, James W. Latta; Treasurer, James E. Barnett; Auditor General, E. B. Hardenbergh; Attorney-General, John P. Elkin; Adjutant General, Thomas J. Stewart; Superintendent of Instruction, N. C. Schaeffer; Insurance Commissioner, Israel W. Durham; Commissioner of Banking, Thomas J. Powers; Secretary of Agriculture, John Hamilton; Commissioner of Forestry, J. H. Rothrock; Dairy and Food Commissioner, Levi S. Wells; Zoölogist, H. T. Fernald; Factory Inspector, James Campbell; Veterinarian, Leonard Pierson; Librarian, George E. Reed; Superintendent of Public Buildings and Grounds, T. L. Eyre; Chief Justice of the Supreme Court, J. B. McCollum; Associate Justices, J. Hay Brown, James T. Mitchell, William P. Potter, John Dean, D. Newlin Fell, and S. L. Mestrezat; Prothonotaries, Charles S. Greene, William Pearson, and George Pearson; Justices of the Superior Court, C. E. Rice, J. A. Beaver, J. J. Wickham, George B. Orlady, P. P. Smith, William Porter, and Dimmer Beeber. N. C. Schaeffer and Judges McCollum and Smith are Democrats; the others are Republicans.

Population.—The population of the State, according to the census of 1900, is 6,302,115, against 5,258,014 in 1890. This is an increase of 1,044,101, or 19.8 per cent. The population by counties is as follows: Adams, 34,496; Allegheny, 775,058; Armstrong, 52,551; Beaver, 50,432; Bedford, 39,408;

Berks, 159,615; Blair, 85,099; Bradford, 59,403; Bucks, 71,190; Butler, 56,962; Cambria, 104,837; Cameron, 7,048; Carbon, 44,510; Center, 42,894; Chester, 95,695; Clarion, 34,283; Clearfield, 80,614; Clinton, 29,197; Columbia, 39,896; Crawford, 63,643; Cumberland, 50,344; Dauphin, 114,443; Delaware, 94,762; Elk, 32,903; Erie, 98,473; Fayette, 110,412; Forest, 11,039; Franklin, 54,902; Fulton, 9,924; Greene, 28,281; Huntingdon, 34,050; Indiana, 42,556; Jefferson, 59,113; Juniata, 16,054; Lackawanna, 193,831; Lancaster, 159,241; Lawrence, 57,042; Lebanon, 53,827; Lehigh, 93,893; Luzerne, 257,121; Lycoming, 75,663; McKean, 51,343; Mercer, 57,387; Mifflin, 23,160; Monroe, 21,161; Montgomery, 138,995; Montour, 15,526; Northampton, 99,687; Northumberland, 90,911; Perry, 26,263; Philadelphia, 1,293,697; Pike, 8,766; Potter, 30,621; Schuylkill, 172,927; Snyder, 17,304; Somerset, 49,461; Sullivan, 12,134; Susquehanna, 40,043; Tioga, 49,086; Union, 17,592; Venango, 49,648; Warren, 38,940; Washington, 92,181; Wayne, 30,171; Westmoreland, 160,175; Wyoming, 17,152; York, 116,413.

Finances.—On Jan. 1, 1899, there was a deficit in the treasury of about \$3,000,000. Owing to unexpected increase in revenues, this deficit was entirely liquidated in 1900. "There is sufficient money to pay all unpaid appropriations as they mature, and there will be on Jan. 1, 1901, a balance, over and above the amount necessary to liquidate all demands, of about \$1,500,000."

The report of the Treasurer shows the total receipts of the treasury department from all sources for the fiscal year ending Nov. 30, 1900, to be \$17,494,211.78. Deducting the interest received on securities in the sinking fund and securities maturing and paid into the sinking fund, leaves the balance of receipts available for general disbursement of \$17,192,817.91. Taking out the \$344,371.50 transferred to the sinking fund, there was a balance of \$16,848,443.41 available for general disbursements. From this amount is deducted three fourths of the tax on personal property re-

turned to the counties, tax on premiums on foreign fire insurance, personal fees, annuities for right of way, oleomargarine licenses returned to the agricultural department, oleomargarine, impure food, and other fines returned to the agricultural department, and fines for violation of the game laws returned to the Game Commission, amounting in the aggregate to \$2,558,613.26, which leaves a balance available for the payment of appropriations of \$14,289,820.15. This latter is the amount of revenue for the last fiscal year available to meet appropriations made by the Legislature. From it, together with the revenue for the year 1899, the appropriations made by the last Legislature have been paid and the deficit liquidated.

The sinking fund amounts to \$6,021,402.12, while the public debt on Dec. 1, 1900, amounted to \$6,815,299.02, leaving a balance of funded State debt of only \$783,890.90.

Valuation and Taxation.—The latest report of the Secretary of Internal Affairs shows the value of all real estate at \$3,027,649,299, being an increase over the preceding year's total of \$46,547,210. The total of taxable real estate is given as \$2,728,163,336. The total amount of taxes collected for all purposes is reported as \$55,808,585.32, being an increase for the year of \$5,492,714.51.

Banks.—The Commissioner of Banking, in his latest report, gives us for 1899 the following totals: Banks, 91; trust companies, 95; savings institutions, 16. Capital is shown as follows: Banks, \$8,152,920; savings institutions, \$110,200; trust companies, \$36,853,497.50. Surplus: Banks, \$5,955,419.78; savings institutions, \$7,515,626.59; trust companies, \$13,124,811.88. Deposits: Banks, \$67,151,966.66; savings institutions, \$99,261,413.90; trust companies, \$158,467,325.28.

Insurance.—The Insurance Commissioner, in his latest report, gives the following figures concerning life and accident insurance as for 1899: In 1899 the companies of the State issued 7,616 policies, insuring \$20,095,459 upon the lives of residents of this State, an increase over the business of the preceding year of 1,557 policies and an increase of \$2,735,416 insurance. Companies of other States issued 602,617 policies in the State, insuring \$183,226,321, making an aggregate by all companies of 610,233 policies, insuring \$203,321,780, being an increase of 144,457 policies and an increase of \$44,784,279. The total losses paid by all life companies in the State during the year 1899 was \$12,477,959.61, of which home companies paid \$1,852,452, and companies of other States \$10,625,507.61.

The insurance in force at the end of 1899 upon the lives of residents of Pennsylvania, including industrial policies of small amounts, aggregated 2,034,017 policies, insuring \$807,973,742, of which 52,858 policies, insuring \$138,234,318, were in companies of this State, and 1,981,159 policies, insuring \$729,739,424, in companies of other States and foreign countries. The Pennsylvania life companies had in force at the close of the year 1899 a total of 162,393 policies, insuring \$410,325,423, against 114,483 policies, insuring \$304,656,265, at the close of the year 1898. The same companies had a total net premium income of \$15,443,451.10 in 1899, against \$12,086,481.75 in 1898, and a total income from all sources of \$19,498,219.41 in 1899, against \$16,280,411.95 in 1898.

Education.—In the year ending the first Monday of June, 1900, the whole number of teachers employed was 29,390, the total enrollment of pupils was 1,151,880, the total receipts for schools and buildings were \$24,916,668.69, and the total expenditures were \$21,470,994.90. The number of

school districts in the State is 2,510; number of schools, 28,330; number of graded schools, 15,720; number of superintendents, 140; number of male teachers, 9,394; number of female teachers, 19,996; whole number of teachers, 29,390; average salaries of male teachers per month, \$44.25; average salaries of female teachers per month, \$37.74; average length of school term in months, 8.33; average number of pupils in daily attendance, 854,040; teachers' wages, \$11,205,482.61; cost of school text-books, \$806,148.30; cost of school supplies other than text-books, \$422,696.87; fuel, contingencies, fees of collectors, and other expenses, \$4,978,540.36. The State appropriation for the school year ending June 5, 1899, was \$5,500,000, and the estimated value of school property was \$54,797,506.32.

Railroads.—The steam railroads of the State, on June 30, showed a capitalization, including stock, bonds, and current liabilities, of \$2,965,077,932, with assets of \$3,007,955,557. The companies included in the reports have 25,885 miles of road; own 11,747 locomotives, 10,709 passenger cars, and 512,048 freight cars. On these roads there are employed 307,737 persons, to whom there was paid during the year \$176,762,468 as compensation for services. The trains of these corporations during the year traversed 257,777,050 miles and carried 205,939,884 passengers and 578,995,338 tons of freight. The passenger earnings amounted to \$109,757,426, and freight earnings to \$331,013,955. With other earnings this makes a grand total of \$498,012,493. The operations of these steam railroads involve an expenditure, exclusive of dividends, of \$428,837,899, and result in the payment to the stockholders of dividends amounting to \$37,823,306.

Factories.—The latest report of the Factory Inspector for 1899 shows the total number of employees to be 773,443—35,440 between thirteen and sixteen years of age, or less than 5 per cent. of the total number of employees being children. Many establishments will not employ children between thirteen and sixteen years of age, on account of the law requiring age certificates and record books to be kept on file.

Forty-four selected industries in 1899 employed 154,422 persons, or 16,437 more than were employed in 1898; \$78,179,333 were paid out in wages to 154,422 persons in 1899, as against \$62,676,615 in 1898; being an increase of \$15,502,718, or 24.73 per cent.

The average yearly earnings of the 154,422 persons employed in the 44 industries, skilled and unskilled, men, women, and children, was \$506.27, against \$454.52 for the 137,935 persons employed by the same establishments in 1898, an increase of \$51.75 a year, or 11.38 per cent. The aggregate value of products for 1899 reached \$377,934,411, an increase over 1898 of \$111,889,881, or 42.06 per cent.

Iron and Tin.—The value of Pennsylvania's production of pig iron for 1899, as officially reported, was \$98,203,803. The average earnings for the year for skilled and unskilled labor was \$495.18, the average days of employment being 327, or nine days fewer than in 1898.

The aggregated tinned production for 1899 of the black plate and dipping works was 331,062,734 pounds, and Pennsylvania's share of the entire production of the United States of tin andterne plate in 1898 was about 37 per cent.

In addition to 21 black plate works, the State had seven dipping works in operation in 1899, making, with the 18 black plate works that turned out a tinned production, 25 plants making a finished product of tin andterne plate. The ag-

gregate value of the 331,082,734 pounds of tin andterne plate produced by these 25 establishments for the year was \$12,165,879. Black plate for tinning was made in 11 counties in 1899.

Lawlessness.—On Sept. 21 a serious affray occurred in Shenandoah, Schuylkill County, growing out of an extensive strike in the anthracite coal fields. Two thousand men were reported to be marching the streets of Shenandoah, firing revolvers and resisting all attempts of the civil authorities to disperse them. Two persons were killed and seventeen wounded. The sheriff of Schuylkill County reported these facts to the Governor, and his inability to suppress the disturbance, and asked that a sufficient number of the National Guard be sent there for the protection of the public peace. This call of the sheriff was seconded by a resolution of the councils of Shenandoah and the personal requests of a large number of citizens. It reached the Governor on Sept. 21. About 7 A. M., Sept. 22, 600 men with their officers were patrolling the streets of Shenandoah, and by noon of that day nearly 2,000 troops were there. No further serious disturbance occurred. By Oct. 31 the strike was adjusted, and the last of the National Guard withdrawn.

Coal Strike.—In August the coal operators refused to accept the scale of wages adopted by the Hazleton Miners' Convention, saying that the scale was too sweeping, and if put into force would reduce producers of coal to bankruptcy in a short time. The miners, on the other hand, declared that the scale was just, and that the coal companies would only be giving the men their rights by signing it. In September 112,000 mine workers in the anthracite region were reported on strike. On Oct. 30 the strike was practically ended, an advance of 10 per cent. in wages until April 1 and an adjustment of the sliding scale being the basis of agreement.

Political.—The Republican vote for President was 712,665; the Democratic, 424,232; Social-Democratic, 4,831; Prohibition, 27,908; Republican plurality, 288,433. The vote for Auditor General was: E. B. Hardenbergh, Republican, 676,846; P. G. Meek, Democrat, 410,746; J. E. Gill, Prohibition, 25,300; W. J. Eberle, Social-Democrat, 2,636; D. O. Coughlin, People's party, 917; N. Seward, Social-Democrat, 3,797. The Legislature in 1901 will consist of 36 Republicans in the Senate and 156 in the House; 13 Democrats in the Senate and 49 in the House.

PERSIA, an empire in central Asia. Muzaffer-eddin, Shah in Shah, or Emperor, born March 25, 1853, succeeded his father, Nasreddin, on May 1, 1896. The Valiahd, or heir apparent, is Mohammed Ali Mirza, born in 1872.

Area and Population.—The area is about 628,000 square miles, mostly desert. The population is estimated at 9,000,000. The city of Teheran has about 210,000 inhabitants; Tabriz, 180,000; Isfahan, 80,000; Meshed, 60,000. Of the population, about 8,000,000 are Shiite Mohammedans, 800,000 Sunnites, 45,000 Armenians, 35,000 Jews, 25,000 Nestorian Christians, 9,000 Guebres or Parsees, and there are probably 800 Europeans residing in the cities. Of the Mohammedans, fully 2,000,000 are nomadic Turks, Kurds, Lurs, and Arabs. The Persians of the higher classes are well educated in Persian and Arabic literature.

Finances.—The revenue of the Shah's Government for 1900 was estimated at £1,500,000 sterling. Towns, villages, and districts are required to pay each a certain assessed amount in cash or kind, these payments constituting about 82 per cent. of the revenue, customs duties 15 per cent.,

and posts and telegraphs, fisheries, mines, and other concessions furnish the remaining 3 per cent. A loan of £500,000 was obtained in England in 1892 for the purpose of canceling the unpopular tobacco monopoly. The Russian Government in January, 1900, authorized a subsidized banking company, organized specially for the object, to make a gold loan of 22,500,000 rubles to the Persian Government, secured by the customs receipts with the exception of those of the province of Fars and those of the ports on the Persian Gulf, the loan to pay 5 per cent. interest and to be redeemed at the end of seventy-five years. The Government undertakes to pay all existing foreign obligations out of the proceeds of this loan and to contract no others until it is redeemed without permission from the bank. The English loan was paid off by the Russian bank before the end of February. The bank may issue bonds equal in amount to the debt of the Persian Government to the bank, and such bonds will be guaranteed by the Russian Imperial Government.

Commerce and Production.—The foreign commerce is estimated at £10,000,000 for 1900. The estimate is based upon the amount paid by farmers of the revenue to the Government, which was £300,000 in 1899 and the preceding year, and £250,000 for two years previous, having been increased from £170,000 in 1894. The export and import trade for 1899 was estimated at £9,000,000, the average rate of duty being taken at 4 per cent. and the profit of the farmers at 20 per cent. Europeans pay a uniform duty of 5 per cent. ad valorem, Persians' rates varying from 1½ to 8 per cent. The Government on March 21, 1899, abolished the farm system in Azerbaijan, Kermanshah, and some other provinces. The chief imports are cotton cloth, woolens, glass, sugar, kerosene, tea, coffee, and drugs. The exports are dates, opium, cotton, wool, silks, carpets, pearls, turquoises, and rice. The imports of the ports of Bushire, Lingah, Bunder Abbas, and Mohammerah for 1898 were £2,091,224, and the exports £1,273,770, the bulk of the commerce being with Great Britain, India, Arabia, and China. The imports at Tabriz, amounting to £682,330 in 1899, consist of cotton goods from Manchester, French and German silks, Russian sugar, and Indian tea; the exports, amounting to £219,930, are raisins, almonds, carpets, shawls, and silk. Through Resht, on the Caspian, considerable commerce is carried on with Russia by way of Baku, the imports in 1896 having been £842,655 in value, including sugar, cloth, silkworm eggs, silver, and petroleum; the exports, amounting to £365,342, consisting of rice, fruits, and cotton. From Bombay through Bunder Abbas the value of £89,547 was imported into Khorassan, and exports to India amounted to £19,681; imports through Meshed from Russian territory were £92,547 in value, and exports £80,320; imports from Afghanistan were £6,206, and exports to Afghanistan £15,073 in value. A railroad convention concluded with Russia provided that no concessions should be granted or railroads built before 1901. The Russian Government has negotiated with the Government of Persia for the construction of a railroad from Julfa to Tabriz, Hamadan, and Bunder Abbas, with a branch line to Teheran. The telegraph lines of the Persian Government have a length of 3,400 miles, besides which 675 miles between Bushire and Teheran, with 2,025 miles of wire, are operated by an English staff, and 415 miles, with 1,245 miles of wire, belong to the Indo-European Telegraph Company.

PERU, a republic in South America. The legislative power is vested in a Congress consisting of a Senate of 48 members and a House of Repre-

sentatives containing 108, the term in both being six years, one third being elected every two years. The presidential term is four years. Eduardo L. de Romaña was elected for the term beginning Sept. 8, 1899. Dr. Isaac Alzamora and Federico Bresani are the two Vice-Presidents. The Cabinet in the beginning of 1900 was composed as follows: President and Minister of Foreign Affairs, Manuel Maria Galvez; Minister of Justice, Worship, and Public Instruction, Elidoro Romero; Minister of the Interior and Police, Col. Domingo J. Parra; Minister of War and Marine, Camillo N. Carillo; Minister of Finance and Commerce, Mariano A. Balaunde; Minister of Public Works, Dr. Carlo Basadre y Forero.

Area and Population.—The area of Peru is 695,720 square miles, according to a recent official estimate. The population in 1896 was estimated at 4,609,999. About a fifth of the native-born population is of pure Spanish descent. Lima, the capital, has over 100,000 inhabitants. Education is free and compulsory in the towns. There were

were estimated at 365,000 soles for Congress, 2,778,000 soles for the Ministry of the Interior, 698,000 soles for the Ministry of Foreign Affairs, 1,244,000 soles for the Ministry of Justice, 3,480,000 soles for the Ministry of Finance, 3,358,000 soles for the Ministry of War and Marine, 340,000 soles for the Ministry of Public Works, and 337,000 soles were for various purposes, the total being 12,600,000 soles.

The foreign debt of Peru consists of two railroad loans contracted in England, the smaller one at 6 per cent. in 1870, the greater one at 5 per cent. in 1872, both secured on the guano deposits afterward seized by Chili. Their amount was £31,579,080, and the payment of interest having ceased in 1876, there were arrears of £22,998,651 due in 1889, when the Grace-Donoughmore contract was concluded, whereby the Government ceded to the bondholders all its railroads, mines, guano deposits, and lands for the term of sixty-six years, and was released from liability for the loans. Chili agreed to pay to the bondholders a part of

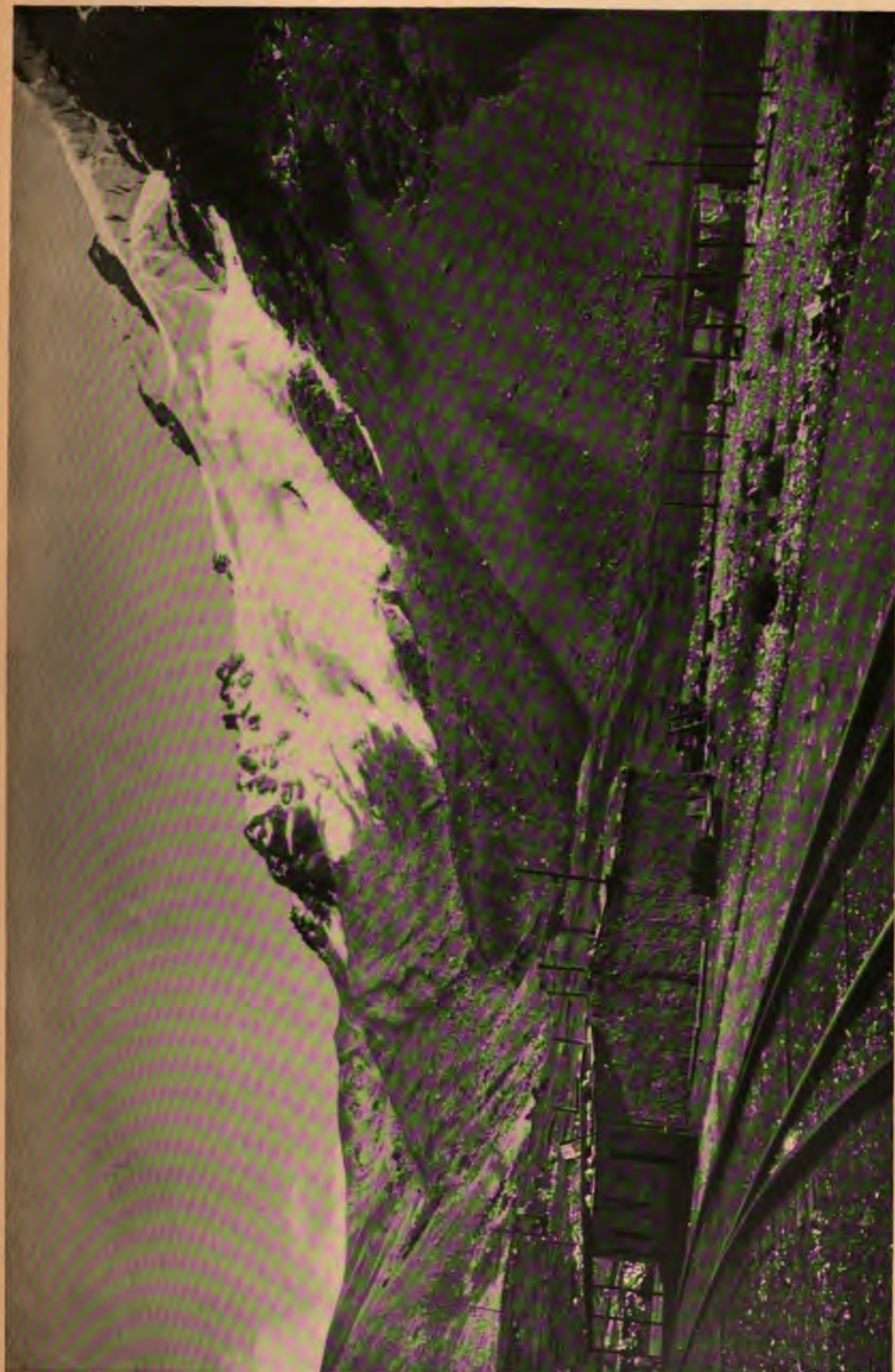


LLAMAS IN DESAGUADERO.

1,152 schools, with 69,892 pupils, in 1897, not including 304 private schools, with 15,700 pupils.

Finances.—The main part of the revenue comes from customs. Land pays a tax of 3 per cent. of the rent. The duties on alcohol, tobacco, and opium and the stamps are farmed out to a company, which engaged in 1896 to pay 126,734 soles monthly and half the profits, and in 1898 renewed the contract for five years, agreeing to pay three fourths of the profits. The Congress in the same year made salt a monopoly, and set aside the revenue derived therefrom for the redemption of the provinces of Tacna and Arica held by Chili. The total revenue in 1898 was 10,785,850 soles, and the expenditure 11,488,240 soles. To cover the deficit in this year and the two preceding years the Government was authorized to raise a loan of 1,500,000 soles, and to arrange with the Tax Collection Company for its repayment. The revenue for 1899 was estimated at 6,000,000 soles from customs, 3,000,000 soles from taxes, 800,000 soles from the salt monopoly, 287,000 soles from posts and telegraphs, and 1,965,000 soles from various sources; total, 11,852,000 soles. The expenditures

the proceeds of the guano deposits, but detained the sums so set apart on account of a dispute, which is still the subject of arbitration. For the consolidation of the internal debt 36,174,150 soles of bonds bearing 1 per cent. interest were issued in 1889. After 9,416,000 soles of these had been redeemed the civil war stopped amortization, which has not been resumed, although the interest is now paid regularly. The amount outstanding and other obligations made the total internal debt 47,591,760 soles in 1898. The gold standard of currency was proclaimed on Jan. 10, 1898, and the gold libra was adopted as the national coin, having the same weight and fineness as the English sovereign, and exchanging for 10 silver soles. The silver coinage from 1874 till the adoption of the gold standard amounted to 40,510,681 soles. In 1898 there were 40,103 of the new gold coins struck and only 120,000 soles in silver. The military force in time of peace consists of 1,940 infantry, 625 cavalry, and 510 artillery. French officers have been employed to reorganize the army. The navy consists of a cruiser displacing 1,700 tons and several small vessels.



THE HIGHEST RAILWAY POINT IN THE WORLD—15,665 FEET, OROYA RAILWAY, PERU.

Commerce and Production.—Coffee is grown in the central parts of the country, where the Peruvian Company has introduced colonists on its lands, comprising 2,750,000 acres. There were 1,239 tons of coffee exported in 1897. The cultivation of cotton is increasing. Sugar plantations in the coast districts produce over a ton of raw sugar to the acre. Cacao, rice, tobacco, wine, and spirits are minor products. Rubber, cinchona, and various medicinal plants and dyes are obtained from the forests. The mines produce gold, silver, copper, lead, zinc, quicksilver, salt, sulphur, coal, and petroleum. Gold is washed by the natives, but most of the mines have been abandoned. The total silver exports in 1897 were 9,730,000 soles. The exports of gold, copper, and lead were 700,000 soles in value. The value of all imports in 1898 was 19,297,272 soles, against 16,128,649 soles in 1897; total value of exports, 30,274,775 soles, against 28,168,452 soles. The imports of cotton goods in 1898 were 4,067,668 soles; provisions, 2,261,543 soles; woollens, 1,376,643 soles; furniture, 1,273,244 soles. The mineral exports in 1898 were valued at 9,481,213 soles; sugar, 9,220,681 soles; vicuña and alpaca wool, 3,082,633 soles; cotton, 2,469,955 soles; coffee, 541,715 soles; borax, 574,226 soles; hides, 831,186 soles; rice, 633,465 soles; cocaine, 651,975 soles. The value in soles of the trade with each of the principal foreign countries in 1898 is given in the following table:

COUNTRIES.	Imports.	Exports.
Great Britain	8,692,771	17,153,996
Germany	3,401,887	2,708,778
Chili	1,868,580	4,588,479
United States	2,078,376	2,873,526
France	1,554,004	820,952
Ecuador	101,978	692,006
Bolivia	82,513	698,926
Italy	661,694	27,819

Navigation.—There were 486 vessels, of 581,044 tons, entered and 485, of 602,945 tons, cleared at the port of Callao during 1898, counting none under 50 tons; at Mollendo, 348, of 462,508 tons, were entered, and at Salaverry, 287, of 408,493 tons, were entered and cleared. The merchant marine in 1898 consisted of 4 steamers, of 3,413 tons, and 63 sailing vessels, of 26,752 tons.

Railroads, Posts, and Telegraphs.—The length of railroads in Peru in 1897 was 911 miles, of which 844 miles were operated by the Peruvian Corporation; the total cost was \$36,000,000. A concession has been given for a railroad, 80 miles long, from Oroya to Cerro de Pasco.

The state telegraph lines in 1897 had a length of 1,400 miles, and 533 miles belonged to the Peruvian Corporation. There are 2,300 miles of telephone wires.

The post office in 1897 forwarded 12,760,771 letters and other pieces of mail matter; receipts were 259,478 soles, and expenses 261,360 soles.

Politics.—The growth of enterprise and introduction of capital into Peru since the cessation of civil disturbances have produced a notable increase in production and wealth. The Government in accordance with legal decisions granted amnesty to political offenders in 1900. The territorial dispute with Chili relative to the retrocession of Tacna and Arica, if a plebiscite in those provinces so decides, as was stipulated in the treaty of Ancon, caused a tension of public feeling in Peru in 1900. Owing to differences of opinion on various questions changes in the Cabinet took place in the latter half of the year. On Aug. 7 the whole Cabinet resigned and a new one was constituted on Aug. 9, as follows: Minister of Foreign Affairs, Riva Agüero; Minister of Justice, Pedro Carlos

Olaechea; Minister of the Interior, Enrique Zagarra; Minister of War and Marine, Capt. Melton Carvajal; Minister of Finance, Rafael Quiroz; Minister of Public Works, José Granda. On Aug. 31 this ministry resigned because the Congress in secret session censured the Minister of Foreign Affairs, and a new one was appointed of the following composition: Minister of the Interior, Enrique Zagarra; Minister of Justice, Pedro Carlos Olaechea; Minister of Foreign Affairs, Felipe de Osma; Minister of War and Marine, Col. Diez Canseco; Minister of Finance, José Vicente Larrañe; Minister of Public Works, Miguel Rojas. On Oct. 3 a new ministry was formed by a coalition of the Democrats and the Civilistas, the two principal political parties, led by Pierola and Candamo respectively. This last Cabinet was composed as follows: President and Minister of Finance, Domingo Almenara; Minister of Foreign Affairs, Felipe de Osma; Minister of the Interior and Commerce, Col. Ernest Zapata; Minister of Justice, Rafael Villanueva; Minister of War and Marine, Col. Pedro Portillo; Minister of Public Works, Agustín Tovar.

PHILIPPINE ISLANDS, an archipelago in the Pacific Ocean, formerly a dependency of Spain, ceded to the United States by the treaty of peace signed at Paris on Dec. 10, 1898. The first military governor, Major-Gen. Merritt, was succeeded, Aug. 30, 1898, by Major-Gen. Elwell S. Otis, who under instructions from the Secretary of War exercised supreme military and civil authority until he returned to the United States and was succeeded on May 5, 1900, by Major-Gen. Arthur MacArthur. Major-Gen. Loyd Wheaton commanded in 1900 in the military district of northern Luzon, Major-Gen. John C. Bates in southern Luzon, Brig.-Gen. Robert P. Hughes in the Visayas, and Brig.-Gen. William A. Kobbe in Mindanao and Jolo, with the Sulu Islands.

Area and Population.—The Philippine archipelago extends over sixteen degrees of latitude, from Borneo to Formosa, and contains as many as 2,000 islands, a few of them large and productive enough to have figured in the world's commerce for centuries. The total area, including the Sulu Islands, is estimated at 115,300 square miles. The population is between 8,000,000 and 10,000,000, mostly of the Malay race, crossed with Negritos, of whom some tribes remain, and in some parts with Chinese, Spanish, and perhaps Japanese. The European population, exclusive of the American army, is about 30,000, and there are 100,000 or more Chinese, who carry on much of the trade and industry. In many of the islands the natives were practically independent under the Spanish control. Manila, the capital, had 154,062 inhabitants in 1887; Lipa, 43,408; Banang, 35,598; Batangas, 35,587; Laoang, 30,642. The sanitary and other improvements wrought in Manila under American administration and the growth of commerce and enterprise already begun promise to make it one of the greatest emporiums of the East.

Finances.—The cedula tax, which was the chief source of the Spanish revenue, was practically abolished by the Americans. Nevertheless, the revenue in 1900 was a third greater than it ever was under Spain. The customs collections were 50 per cent. greater. The military government saved a surplus of \$6,000,000 to be devoted to public works, the most needed of which was the improvement of Manila harbor according to plans made by Spanish engineers about 1880, with minor modifications made by Capt. John Biddle and his assistants. Two long breakwaters were partly constructed by the Spaniards. To finish

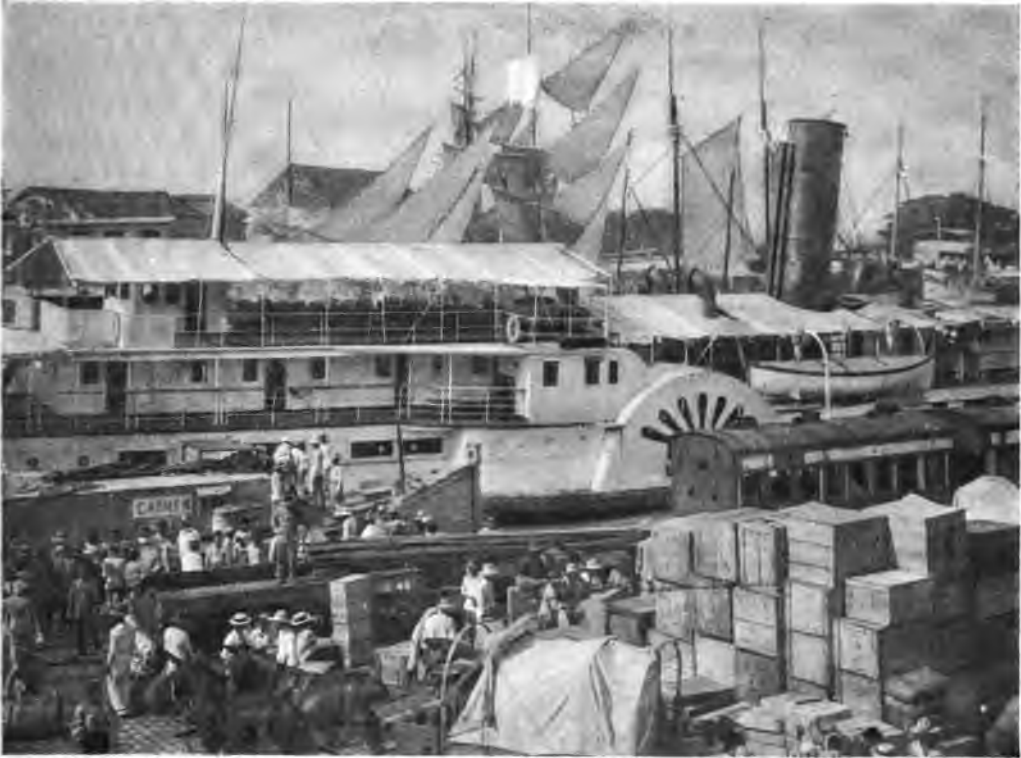
these and dredge out the inclosed new harbor so as to admit the largest vessels it is estimated will cost \$2,500,000. At present vessels drawing more than 16 feet must lie 2 miles off shore, and discharge or load by means of lighters, a process that becomes impossible in rough weather. For this reason freight rates from Manila to Hong-Kong are about the same as they are from San Francisco to Hong-Kong.

Commerce and Production.—The Philippine Islands have long furnished the whole world with the cheap and strong rope fiber known as Manila hemp, and Asia with tobacco, mostly in the form of cheroots manufactured in Manila. Sugar is another important product, and coffee and indigo are cultivated also. Copra is exported from many of the islands. The total value of imports in 1896 was estimated at \$10,664,000, and of exports at \$20,237,000. Rice, flour, textiles, wines, petroleum, and coal are the principal imports. Coal is found on the island of Cebu, and mines have been opened since the American occupation, yielding 5,000 tons a month. Petroleum has been discovered in several of the islands. Copper, silver, marble, kaolin, sulphur, and other minerals are found in the islands. A lead mine is in operation in Cebu, and iron is smelted in Luzon. In the fall of 1900 as many as 1,200 prospectors and practical miners scattered through the different islands, nine tenths of them Americans. They pushed their way into the more inaccessible regions, furnishing their own protection. At Man-cayan and Suyoc in the province of Lepanto immense deposits of gray copper and copper sulphide were discovered, running through which are veins of gold-bearing quartz. Lignite exists in Luzon, Batan, Mindoro, Masbate, Negros, and Mindanao, as well as in Cebu. Although they have been worked near the surface only, the quality is superior to Japanese and Australian coals, not clinkering nor soiling boiler tubes. Some of the deposits are very extensive. In southern Mindoro large fields are found within 6 miles of a deep and safe harbor, and some of the Cebu deposits have such an advantage. Gold has long been washed or extracted from rock containing considerable visible free gold by the Igorotos in the districts of Benguet, Lepanto, and Bontoc, among the mountains of northern Luzon. American miners were received among them soon after the breaking up of the Tagalog rule, and began to dig for gold with gratifying results. Prospectors have located extensive deposits of low-grade free-milling ore which they say will yield large and certain returns as soon as concessions can be obtained and machinery put into place. Modern gold-mining machinery has never been used in the Philippines. Extensive deposits of rich iron ore can be utilized as soon as the coal mines are developed. The Philippine Commissioners have recommended the early establishment of a tribunal by which the legal status of hundreds of claims can be established and the enactment of a mining code for the archipelago at the earliest possible moment. The development of mineral deposits would give increased opportunities for the employment of labor which would benefit the Philippine people. New forestry regulations made in 1900 reduced the high price of lumber by giving impetus to the timber trade. The forests on the islands are of vast extent, and contain a great variety of timber—12 species of superior qualities, 60 of high commercial value, 307 others that have been examined, and probably 50 not yet classified. Included in the list are very hard woods, capable of taking a beautiful polish; woods that resist climatic influences and are

proof against attacks of white ants; and woods suited for piles, on account of their imperviousness to attacks of the teredo. There is a great variety of trees yielding valuable gums. Rubber and gutta-percha are abundant in Mindanao and Tawi Tawi. At least 17 dyewoods are found, and other trees produce valuable essential oils and drugs. The forestry bureau, organized on April 14, 1900, made an estimate that there are 40,000,000 acres of forests in the archipelago. The forestry regulations of the former Spanish Government have been adopted with modifications. The revenue collected from forest produce on the Government lands was at the rate of \$96,000 a year, and was capable of being largely increased. Notwithstanding the state of war the export of hemp in 1898 was 1,585,212 piculs; of sugar, 2,843,116 piculs; of tobacco, 4,061,540 pounds; and the number of cigars was 129,840,000. The export of copra in 1897 was 898,416 piculs; of sapan wood, 65,485 piculs, but only 19,606 piculs in 1898. The United States takes about half the hemp, and Great Britain and Canada the rest; China and Japan half the sugar, and the United States and Great Britain most of the rest. The imports of the United States from the Philippines, which were \$4,982,857 in value in 1896, declined to \$3,829,003 in 1898, and recovered to \$4,409,774 in 1899. The exports from the United States to the Philippines were \$162,466 in 1896, and in 1899 they were \$404,171. The British domestic exports to the Philippines in 1897 amounted to £400,264. In the year ending June 30, 1900, the imports into the Philippines were larger than in any previous year since 1880, the total value being \$23,039,587, whereas in 1895, 1896, and 1897 they scarcely exceeded \$10,000,000 in any one year, and in the period from 1880 to 1894 inclusive they averaged \$17,000,000. The average value of imports from the United States from 1887 to 1891 was \$130,662, and from 1892 to 1896 the average was \$135,228. In 1900 the imports from the United States amounted to \$1,656,469. There was an increase in French imports compared with the last years of Spanish rule of 135 per cent.; in German, 62 per cent.; in British, 27 per cent. The principal classes of imports in 1900 were cotton manufactures and cotton; chemicals, drugs, and dyes; breadstuffs; meat and dairy products; malt liquors and cider; books and printed matter; glassware; iron and steel manufactures; leather and manufactures thereof; and wines and spirits. The exports of the Philippines for the year ending June 30, 1900, were \$21,766,440 in value, an increase of 6 per cent. over the average from 1880 to 1894. The quantities of some of the principal exports have decreased, but not the value, especially in the case of Manila hemp, of which 94,000 tons were exported in 1894, with a value of \$7,243,842, and only 75,000 tons in 1900, with a value of \$11,398,943. The decline in production is partly accounted for by the disturbed condition of the country, preventing agricultural and productive development, and partly by the retention in the producing districts of the hemp until it suits the financial convenience of the interested parties to export it. There is a railroad, 122 miles long, running northward from Manila through Luzon to Dagupan. There were 720 miles of telegraph lines and cables, which have been increased since the American occupation to 3,141 miles. In Negros more sugar was in cultivation in 1900 than ever before. The cultivation of rice in some provinces was retarded by the loss of draught cattle through disease and war, and the condition was made worse by the appearance of the rinderpest among the carabaos.

Military Operations.—After the first series of encounters with American troops Aguinaldo, the chief of the insurrection in Luzon, who had been proclaimed President of the Philippine Republic, abandoned his military organization, finding that his compatriots, however securely they intrenched themselves, would not stand up against a vigorous charge of the smallest body of American soldiers, and started a guerrilla warfare, for which the conditions of the country offered peculiar advantages, enabling the insurgents to appear and disappear at their convenience. Whenever a patrol or a supply train with a small escort was passing they would gather with arms in their hands for the attack, and immediately after-

erations against concentrated field forces of insurgents. The number of men shot from ambush by small guerrilla bands exceeded the number of fatal casualties of any previous time. For the six months from Jan. 31 to July 31, 1900, the total number of deaths in the army was 24 officers and 971 enlisted men, of whom 4 officers and 204 men were killed in action, 3 officers and 43 men died of wounds, and 17 officers and 724 men died from disease and other causes. The daily average of deaths was 4.7, and it has steadily increased, the men becoming more and more debilitated by service in the tropical climate. In June, 1900, out of a total of 63,284, there were 5,563, or 8.79 per cent., sick in hospital. The most difficult



QUARTERMASTER'S WHARF, MANILA.

ward they could return within the American lines in the white garb of the country, and resume the attitude of peaceful natives. A widely scattered formation of Filipinos quickly followed the adoption of guerrilla tactics, and this necessitated a corresponding dispersion of American troops and put a greater strain upon the garrison than regular warfare could. There were 53 military stations in the islands on Nov. 1, 1899. By Sept. 1, 1900, the number had increased to 413. The consequence of this extension of the field of operations was that regular combats were no longer fought, yet the losses were not inconsiderable in the large number of minor affairs. During this period the casualties among the Americans were 268 killed, 750 wounded, and 55 captured; among the Filipinos, 3,227 killed, 694 wounded, and 2,684 captured. The extensive distribution of troops and the apparently desultory work strained the endurance of the soldiers to the utmost, and demanded greater discipline and courage as high as they exhibited during the period of regular op-

problem in the commissariat service was that of supplying fresh meat to the military posts. The meat was brought to Manila in naval refrigerating ships, and in transit from there to outlying stations much of it spoiled and was condemned on arrival. The losses of stores were abnormally large, but theft or capture accounts for less than 3 per cent. of the loss. The difficulties of transport increased in proportion to the extent of territory to be protected. The native ponies proved most successful.

The policy of guerrilla warfare was adopted at a council of war held at Bayambang on Nov. 12, 1899, which was attended by Gen. Aguinaldo and many other Filipino military leaders. A resolution was adopted that Aguinaldo's insurgent forces, constituting the northern army, were incapable of further resistance in the field, and as a consequence it was decided to disband the army, the generals and the men to return to their own provinces with a view of organizing for resistance by means of guerrilla warfare. Uniforms were thenceforth

discarded, and the American soldiers, who from the first were exasperated by every form of Malay treachery and a total disregard of the rules of civilized warfare and of the restraints of honor as understood by themselves, had now no means of recognizing the foes who were the heroes of the native communities, and often the most forward in their offers of loyalty and services. This made the Americans more relentless and increased their contempt for the Filipino character, which in turn made the Filipinos more bitter in their hatred for the Americans, whom they despised for the drunkenness and debauchery in which some indulged, and more ardent and united in their alleged struggle for national liberty. The army of Trias in the

of schools, their open activity was commendable. At the same time they were exacting contributions and supplies and recruiting men for the Philippine forces and sending all possible military information to the Filipino leaders. Wherever in any part of the islands a group of insurgents was active all contiguous towns contributed to its support, and without their aid it could not subsist. The towns, therefore, although in American occupation and having a municipal organization established and controlled by the American military commanders, were the bases for all military activities of the insurgents, not only furnishing supplies for the flying columns of guerrillas, but affording secure



BAMBOO RAFTS, BROUGHT TO MANILA ON THE BINONDO CANAL.

south was still intact, and was only broken up by the campaign of Gen. Bates, in which Gen. Schwan's column got in the rear of the rebels and shut them off when Gen. Wheaton advanced in January, 1900. The policy of the United States Government, which was loyally carried out by the commanders in the Philippines, forbade a resort to the retaliatory measures usually adopted to check the treacherous conduct of an irregular foe. Punishment was not visited on the villages and towns, in which it was attempted to institute municipal government under American auspices. While the guerrilla warfare was at its height most of the towns throughout the archipelago, under the advice and control of the military authorities, organized municipal governments, for which kind of local administration the people evinced such intelligent capacity as to encourage the expectation of rapid progress in the art of self-government when the larger political administrations could be organized. The *presidentes* and other town officials installed by the military authorities after the people had signified their choice readily subscribed to the obligation of exclusive fidelity to the sovereign power of the United States, and outwardly they complied with all due forms of decorum and loyalty. They acted openly in behalf of the Americans, yet secretly they aided the insurgents. They even appeared zealous for the success of the institutions introduced by the Americans. In all matters touching the peace of the town, the regulation of markets, the building of roads, streets, and bridges, and the institution

places of refuge. This was true of all parts of the archipelago excepting the part of Mindanao occupied by Moros and the Jolo group. The Moros were in no way subject to Tagalog influence, and while hostility to Americans ran high in Luzon and the other islands they appeared to be satisfied with American control and anxious to maintain existing conditions. The success of the guerrilla system depended upon unity of action among the native population. How such unity was brought about, the American officers could not understand. How the officials installed by the Americans and other Filipinos who professed with apparent sincerity to believe American sovereignty to be beneficial and necessary were influenced to aid the insurgents, was inexplicable. Intimidation accounted for the situation to some extent, and captured correspondence revealed the efforts of the insurgent leaders to intimidate and control the people. Fear, however, could not be the only motive, and Gen. MacArthur thought it more probable that the adhesive principle came from ethnological homogeneity, which induces men to respond for a time to the appeals of consanguineous leadership even when such action is opposed to their own interest and convictions of expediency. He tried to ascertain by inquiries among the various social classes what were the definite aspirations of the insurgents. The leaders themselves seemed to have no expectation of founding a stable independent Philippine republic except with the support of the military and naval power of the United States

to preserve and defend it. Their desires, as far as they are based on patriotic ideals and not on personal ambition, greed, and love of power, are compatible with the American policy, as conceived by Gen. MacArthur, which must result in planting republican institutions throughout the archipelago accompanied by the safeguards of personal, political, and religious liberty which are possible only under the auspices of the Constitution of the United States, so that in its ultimate form the archipelago shall assume the appearance of one or more self-supporting commonwealths, with a population attached to their institutions and capable of maintaining them, even in the improbable event of the withdrawal of the creative power. At present and for many years to come the necessity of a large American military and naval force is apparent. Education is the means required for bringing about political enlightenment. Considerable progress has been made, and, considering the circumstances, the results are surprising. The almost universal aspiration for education and the specific desire to learn the English language must be regarded as an involuntary expression of friendship and of confidence in American motives and ultimate aims. The people are intelligent, generous, and flexible, and will probably yield quickly to political tuition when thoroughly informed of American institutions and purposes.

The maintenance of a great many widely scattered garrisons, with consequent increase in the perils and hardships of the soldiers and in the cost of administration, transport, and supply, was rendered expedient because the insurgent Tagalogs deliberately adopted the policy of murdering all their countrymen who were friendly to the United States. As rapidly as the American troops occupied territory the policy was followed of inviting inhabitants to return to their peaceful vocations and of aiding them in the re-establishment of their local government, and the protection of the United States was promised. To render efficient protection to peaceful and unarmed Filipinos who submitted it was necessary to maintain the American forces in the Philippines at almost the same strength as was required when Aguinaldo had a large and well-armed army in the field. The actual power of resistance possessed by the insurgents decreased rapidly as the Americans extended the posts, until their military activity was little more than a form of brigandage, but the influence that they exercised over the sympathies or fears of the people diminished slowly. The *ladrones*, or robbers, who crop up in the islands always in troublous times, took advantage of the rebellion and worked in harmony with the *insurrectos*, who supplied them with arms. A more stringent way of proceeding was adopted later, when the guerrilla war became

more desperate and ruthless, the people at large more well disposed and willing to accept American rule, and the officers better acquainted with the people and able to distinguish between those who were active in the rebellion and those whom they blackmailed and intimidated. Houses and barrios, or small villages, from which troops were fired upon or which harbored and hid *ladrones* or *insurrectos* who were being pursued were destroyed, and hostile natives who were caught red-handed were no longer released after a few days, but were kept confined in great military prisons. The search for arms was so actively and thoroughly pursued that the natives turned in not only bolos, but rifles. The mountain barracks that the insurgents had built as storehouses and shelters in the rainy season were sought out and destroyed, as well as their watchtowers and lookouts, and in these quests quantities of rice, sugar, clothing, and ammunition were captured. To every insurgent who surrendered his rifle \$30 was given. The barbarities practiced by the insurgents to obtain contributions when their influence began to wane alienated the sympathies of most of their peaceful adherents. In the early



NATIVE FILIPINOS, AT ANGELES, SEVENTY MILES NORTH OF MANILA.

part of the war the *Kalipunan*, their secret society, had strong branches in every town, was active even in Manila, and in the interior controlled the whole population. Eleven of the officials at the head of the administration in the province of Tarlac were arrested and condemned for conspiring with

insurgent leaders, and presidentes of the villages had frequently to be deposed. The insurgents were strong enough to harass the garrisons daily. The generals led strong expeditions through the country, established posts, and the more the soldiers came into contact with the people and were able to protect the pacificos, the less formidable became the resistance. In the early spring campaigns were conducted under Gen. Hughes in Panay and under Gen. Bates and Gen. Kobbe in southeastern Luzon, attended by many sharp battles. Gradually, as the army occupied the islands and spread out into small garrisons, the number engaged descended the scale from brigades to regiments, to battalions, to companies, to squads, and while the number of actions increased, the number of casualties diminished. Thus in February, 1899, the first month of the rebellion, there were 64 engagements, in which 66 officers and men were killed and 360 wounded; in the second month 80 were killed and 563 wounded in 61 actions; and in June, when operations grew slack on account of the weather, 32 were killed and 135 wounded in 32 actions. In December, 1899, there were 75 actions, in which 19 were killed and 81 wounded; in January, 1900, when, besides desultory actions in the north, a regular campaign was proceeding in the southern provinces of Luzon, in 114 actions 41 Americans were killed and 131 wounded; in February, 30 were killed and 70 wounded in 104 actions; in March, 21 were killed and 62 wounded in 103 actions; in April, 38 were killed and 67 wounded in 121 actions; in May, 28 were killed and 66 wounded in 108 actions; in June, 25 were killed and 56 wounded in 131 actions. The conflict at this point had descended to bushwhacking and brigandage. The distribution of troops in 300 posts dispelled hostility and improved the temper of the people, who had been originally aroused by absurd falsehoods of the leaders, such as the statement that the United States Government meant to place them on reservations, where they would die out like the American redmen. Insurgents who did not surrender after defeat divided into small guerrilla bands or became ladrones. The mass of the people longed for peace and were willing to accept the government of the United States. Nearly all the prominent generals and politicians of the insurrection were either captured in these months or voluntarily surrendered and took the oath of allegiance to the United States. The policy of leniency and the promise of amnesty induced them to surrender. The small bodies of insurgents remaining under arms fled to mountain fastnesses, whence they issued for night attacks, usually harmless, or to ambush small American detachments, or to collect contributions or recruit among the people, whom they terrorized by cutting out tongues, cutting off limbs, or burying alive, and by their murders and robberies. They made themselves detestable, and still they maintained a surveillance over the people, even in garrisoned towns, and whoever gave information to the Americans usually risked his life.

In June the Filipino leaders plotted an uprising against the authorities in Manila, a general massacre of Americans and of the natives serving or friendly to the Government, and the seizure of arms and ammunition to re-equip the insurgent forces. Inhuman conduct marked the guerrilla campaign from the beginning on the part of the insurgents. When one of their camps was attacked in January they tried to strike terror into the breasts of the Americans by leading out 5 prisoners and shooting them. Their military power, even as a guerrilla force, was broken before

the rainy season began. Yet their reign of terror continued, and the acts of vengeance and rapine that they committed on the amigos, the friends of the Americans, necessitated constant vigilance and activity on the part of the troops.

On June 21, 1900, by direction of the President, a proclamation was issued by Gen. MacArthur granting amnesty to all insurgents who made submission. Many of the leaders took advantage of it, and large numbers of insurgents delivered up their arms.

Aguinaldo and the other leaders who still held out were watching the trend of public opinion in the United States. When they found that the leaders of one of the great political parties seemed ready to commit the fate of the Philippine Islands into their care, and that whereas before only a group of independent politicians and publicists in the United States befriended them, they had a prospect of making terms with the United States Government to suit themselves if the presidential election should be won by that party, they were spurred to a supreme effort. When the issue was once raised in American politics fresh disturbances broke out, not in Luzon alone, but in Leyte, Panay, Samar, Cebu, and other islands where the Tagalogs had introduced their doctrines and authority in the early days of the rebellion. In central and northern Luzon, which American troops had first occupied in force, the natives had learned to trust Americans and to desire a settled state of affairs under their government. They could not be stirred up anew to any extent. Some of the principal members of Aguinaldo's former government, such as Buencamino, the Secretary of State in the Malolos administration, Mabini, and Paterno, and some of his best generals were now co-operating heartily with the Americans, and telling the natives to submit. Of the generals, Pio del Pilar, Macabulos, Catalino, Garcia, and others had surrendered or been captured. It was in southern Luzon and the Visayas that the hostilities broke out anew. The departure of two regiments for China, and the prospective return to America of the volunteers forming half the army of occupation in a few months, encouraged the insurgent leaders in the belief that they could by holding out have matters go in any way they would. The inclination of the people not actively engaged in the rebellion to embrace the American cause was checked by the revival of terrorism. The presidentes and municipal councilors appointed in towns where local self-government was being introduced under American auspices were in some instances murdered even in central Luzon. The army of 65,000 men could not guard against such reprisals. The men formerly identified with the Philippine Republic and prominent Filipinos who preceded them in the expression of American sympathies were no longer safe in Manila. Many of them went away to Hong-Kong. The high prices of food—40 to 75 cents a pound in gold for meat, and rice double the normal price—had much to do with the discontent. In Spanish times the Government came into competition with the vendors when meat sold for more than 10 cents a pound. All northern Luzon, except in Nueva Ecija and Bulacan, was practically free from insurgents in August, and the people were planting and asking for municipal government. In southern Luzon insurrectionary bands were dodging from one mountain refuge to another, as also in Samar, Leyte, and parts of Panay; but in Negros, Cebu, Romblon, Masbate, Sibuyan, Tablas, Bohol, and other Visayan islands there was little disturbance. In Mindanao ladrones made the country dangerous near the old Tagalog penal settlement of Cagayan



BRIDGE OF SPAIN, MANILA.

and at Surigao. Every effort that the insurgent leaders made to mass together enough men to crush one of the garrisons failed. The recrudescence of disturbances began in August, and in September the situation became so much worse that Gen. MacArthur asked for and received reinforcements to his army of 65,000 men. So many men were required to furnish supplies to distant garrisons, escorts for wagon trains and for military and civil officers, and the protection of peaceful natives against ladrones and vengeful insurgents, as also the Government property scattered among the numerous stations, that few were left for active operations against the remaining insurgents and robber bands. In September the country north of Pasig, including all Bulacan, became disturbed, as well as the south, including Tayabas. At Mavitac, Capt. Mitchell with 140 men attacked 800 insurgents in position, and eventually they were forced to retreat, but the 2 chief officers and 22 men of the Americans lost their lives. Several small engagements took place in the Ilocan provinces. In October the insurgents redoubled their activity, although without having any centralized military organization. Their civil administration had entirely disappeared when their army was broken up and the United States troops occupied the provinces, except that wherever municipalities were organized by the Americans rival municipal authorities secretly collected contributions and exercised judicial and executive powers in the name of the Philippine Republic. In some instances they were the very officials whom the American Government had installed, who seemed to carry out their proper official duties and their treasonable activities with equal zeal. One band of about 400 insurgents the troops pursued vigorously and wiped out because it was led by an American deserter. In an engagement fought on Oct. 24 a small force of Americans was compelled to retreat before several thousand insurgents. Gen. Vicente Lukban and his men had full sway in the island of Samar with the exception of Catbalogan, Calbayog, and Labuan, and the American garrisons in these seacoast towns he worried constantly and defied. Other such freebooters flourished in places where the Americans could not develop military strength, growing rich from the tribute they levied on the planters and merchants, but having no communication with each other or with Aguinaldo, who was still in hiding. A Filipino representative, Agoncillo, appeared at this time in the United States and issued a proclamation declaring that the war would last until the Filipinos gained independence; that such was the desire of the entire population; and that even if the Americans triumphed, peace would be only temporary, and a strong army would be required to hold the people in subjection.

After the presidential election was over the extraordinary rebel activity subsided at once. No insurgents were left excepting marauding bands of ladrones and the independent military chiefs who lived by blackmail. Notorious desperadoes who feared punishment for their crimes kept a few followers together in the mountains. The rest of the insurgents gradually surrendered, and in provinces such as Iloilo, in the island of Panay, where the bulk of the people, through rebel sympathies or fear of rebel vengeance, had hesitated to take the oath, they came in thousands to swear allegiance to the United States. The Katipunan Tagalogs, who were the backbone of the revolution, and the native padres, who had done most to encourage the spirit of resistance, accepted American sovereignty with apparent sincerity or resignation. The submission of the Tagalogs set the troops free

to re-establish peace and introduce orderly government in the southern islands.

Organization of Civil Government.—The Philippine Commission, appointed to report on the question of civil government for the islands, composed of J. G. Schurman, George Dewey, Charles Denby, and Dean C. Worcester, reported to the President in January, 1900, recommending the appointment of an American governor, to be assisted by a council containing both natives and Americans, and of provincial governors, who should be Americans. The constitution of a Legislative Assembly was suggested, part of the members of which should be elected and the others nominated, the acts of this body to be subject to veto by the United States Government. The islands should be subdivided into administrative divisions, and natives as well as Americans would be eligible for administrative offices. A new Philippine Com-

mission was appointed to report to the President on the conditions of the islands, to legislate in civil and financial matters subject to the approval of the military authorities, and to formulate schemes for local self-government and the development of civil institutions to supersede the military authority after the establishment of order. The decree introducing autonomous and decentralized municipal government was promulgated by Gen. Otis on March 29, 1900. The laws for the government of the Philippine municipalities were prepared by a board of which Cayetano Arellano, Chief Justice of the Philippines, was president. The municipal government of each town was vested in an alcalde and a municipal council, to be



A TAGALOG, NATIVE OF MALABON.

chosen at large by the qualified electors of the town for the term of two years from the first Monday in January next after the election and until their successors are chosen and qualified. The number of councilors varies from 3 in towns of fewer than 10,000 inhabitants up to 18 in towns of the first class with over 25,000 inhabitants. Each elector before casting his ballot is compelled to take an oath that he is not a citizen or a subject of any foreign power, and that he recognizes and accepts the supreme authority of the United States of America, and will maintain true faith and allegiance thereto. The electors are those who have held office under Spanish rule as municipal captain, gobernadorcillo, or lieutenant; those who pay \$30 or more in taxes; and those who speak, read, and write English and Spanish. Ecclesiastics, soldiers in active service, persons receiving salaries from municipal, provincial, or Government funds, debtors to such funds, contractors of public works and

their bondsmen, clerks and functionaries of the administration, bankrupts until discharged, or insane or feeble-minded persons can in no case be elected or appointed to municipal office. The alcalde is authorized to appoint all nonelective officers of the municipality, exact punctual payment of taxes, and punish violations of municipal ordinances and regulations. The municipal council has power to create the offices of municipal attorney, treasurer, secretary, and such offices as may be necessary to manage the finances and property of the town, maintain municipal prisons, fire department, and schools, and to levy and collect taxes. All ordinances before taking effect are to

not higher than in the average American State. These with the revised customs tariff would give less annoyance than the Spanish taxes, and after peace was restored would produce a revenue sufficient to pay the expenses of efficient government, including a militia and constabulary. The adoption of the gold standard of currency was recommended. The commission prepared a stringent civil service law, giving opportunity to Filipinos and Americans, with preference to the former where qualifications are equal, to enter the lowest rank, and by promotion reach the head of the department. Later soldiers who had been detailed to discharge civil offices, and who wished on their



THE CITY OF JOLO.

be approved by the alcalde. Taxation shall be uniform and just, and persons deeming themselves injured by any tax levy may protest to the council and appeal from its decision through the alcalde to the provincial governor. The governor of the province is president of all the municipal councils, and may inspect and supervise the administration of all municipal affairs, hear and determine all appeals against the acts of municipal corporations or their officers, and suspend or remove municipal officers and appoint substitutes until the next general election, or may call a special election, reporting the cause to the governor of the islands. As a temporary expedient the commanding officers of military districts were authorized to appoint the first alcaldes if it was not practicable or advisable to have them elected. The municipal governments were soon established under the provisions of this law. In villages presidents were appointed in accordance with the choice of the people. When such officers were detected in seditious acts they were removed and others were appointed. The new Philippine Commission had for its president Judge William H. Taft, with whom were associated Dean C. Worcester, Luke E. Wright, Henry C. Ide, and Bernard Moses. The commissioners formulated new tariff and tax laws. The Spanish tariff rates that were still operative were nearly prohibitory for many articles, preventing the importation from America of canned goods, machinery, and other important commodities. The Spanish revenue laws threw the burden of taxation on the poor and gave the wealthy comparative immunity. The inland revenue was derived chiefly from the poll tax, the taxation of small businesses, a fishing license, and the like. The commissioners recommended instead a reasonable land tax and a tax on corporation franchises

discharge from the army to remain in the civil service, were exempted from examinations. Reforms in civil and criminal procedure, the criminal code, and the judicial system were adopted on the recommendation of the Filipino bar. A branch railroad into the mining country of Luzon, 45 miles in length, was considered favorably. Calls came from all parts of the islands for public schools, and the supply of English teachers was far short of the demand. Native children showed great aptitude in learning English. Night schools were established for teaching English to adults. Only a small fraction of the people speak Spanish. The creation of a central government like that of Porto Rico, securing all rights described in the bill of rights and the Federal Constitution, promised to bring contentment, prosperity, education, and political enlightenment. The subsidence of the rebellion toward the close of the year gave grounds for the opinion that the disturbances could better be suppressed by the native police of a civil government, with the army as an auxiliary force, than by a continuance of complete military control. The commission was embarrassed in securing good material for judicial and other service by the provisional character of the military government and its uncertainty of tenure. Legislation by congress to create a central civil government was urgently needed. Until such a bill was passed no public franchises could be granted, nor any mining claims, and no substantial investment of private capital in internal improvements was possible. The sale of public lands, forest concessions, and the grant of railroad and other franchises seemed desirable to the commissioners, and especially the starting of mines by hundreds of American miners who were on the ground awaiting a law to perfect their claims. The beginning of

these enterprises would be a good element in pacification, and it was recommended that the operation of the law of Congress to establish civil government be not postponed until the complete suppression of all insurrection, but only until, in the President's opinion, civil government may be safely established. In the first public legislative session of the Philippine Commission \$2,000,000 in silver were voted for the construction of roads and bridges, \$5,000 for the preliminary survey of the proposed railroad from Dagupan to Benguet, and \$5,400 for schools.

A strong peace party, called the Federals, was organized among the Filipinos. They favored the adoption by the natives of the Protestant religion, and later another party, the Conservatives, also in favor of peace and American sovereignty, was formed to represent the views of the native priests, and to voice the hope of ultimate national independence after a period of American rule and tutelage. The problem of the friars, which led to the original rebellion against Spanish authority, was the one that agitated the Filipinos most. The friar was the embodiment of all authority, governmental as well as religious, in his locality. The rebels expelled the friars from their places, and the Filipinos were generally opposed to allowing them to return. Immorality was one of the grounds of complaint, and instances were proved, but this was not the principal one. The Augustinians, the Dominicans, the Franciscans, and the Recoletos are owners of 403,000 acres of cultivated ground, besides which they have large sums of money to loan. The United States engaged to protect them in their possessions in the treaty with Spain. They had transferred their property to others, but the transfers are not genuine and they remain the owners. The commission recommends that their estates be purchased for public lands out of the island revenues, by condemnation if necessary, though the orders have expressed a willingness to sell at a satisfactory price. The secular clergy is composed mainly of Filipinos, while the monks are mostly Spaniards. The important cures have been filled by these monks, and the commissioners would like to see American priests sent to the islands to take their place. The commission enacted a law when the insurrection had subsided declaring persons ineligible to public office who were found in arms against the United States authority after March 1, 1901, or who aided or abetted insurrectionists. Sites for penal settlements and for a leper colony were found in the southern islands.

PHYSICS, PROGRESS OF, IN 1900. Constitution and Properties of Matter. *Inorganic Life.*—Guillaume (Archives des Sciences, February) notes that certain physical processes have close analogies in physiology, and may be regarded as constituting an elementary form of life. Among such processes are fatigue and adaptation to impressed forces. An instance of the latter is the hardening of a metal at the point of impending rupture, which may be termed an instance of protective modification. Similarly the gray iodide or chloride of silver in the Becquerel process of color photography assumes the color of the incident light, and thus enables itself to reflect it. If it did not do that it would have to absorb the radiation, and the energy so absorbed would have the effect of reducing the silver salt.

Matter and Ether.—Sagnac (Comptes Rendus, Nov. 20, 1899) shows that Fizeau's effect, in which the ether is apparently dragged along by a column of water in motion, consists of two opposite effects—the mass effect, which, owing to the diminution by its motion of the useful mass of water traversed

by the ray, produces an apparent dragging of the ether, and the motion effect, which is the same as if the cylinder containing the water moved with respect to the source, without any water entering or leaving it. The whole effect is a retardation in the time of propagation. Kelvin (Philosophical Magazine, August) has solved mathematically two problems relating to the motion of matter through the ether, namely, to find the orbit of an ether particle disturbed by a moving atom and the path traced through an atom (supposed fixed) while the ether moves uniformly in parallel lines. In a subsequent paper (*ibid.*, September) he shows that gravity may be explained by supposing the positive electron to condense ether in its neighborhood and the negative electron to rarefy it.

Size of Molecules.—Gerstmann (German Physical Society, Oct. 20, 1899) has tried to estimate the size of molecules by determining the heat of solution of a nonelectrolytic substance in a liquid when the former is taken (1) in a lump, (2) in a finely powdered condition, and also the heat absorbed on mixing two such solutions of different concentrations. He used a special modification of Bunsen's calorimeter, but so far has attained no other result than that the two heats of solution differ from each other. Jäger (Vienna Academy) calculates the sizes of the ions, or electric carriers in an electrolyte, from the specific resistance, on the assumption that this resistance is entirely due to viscosity. He also assumes that the ions are spheres, that anion and cation have equal diameters, and that the density of the electrolyte is the true density of the material. For potassium chloride he finds $d = 66 \times 10^{-8}$ centimetres, while according to the kinetic theory of gases $d = 96 \times 10^{-8}$ centimetres for chlorine alone. (See also *Electrification*, under *ELECTRICITY*, below.)

Molecular Motion.—Exner (Annalen der Physik, August) has studied the velocity of particles in so-called Brownian motion, using gum dissolved in alcohol and precipitated by water. At a temperature of 23°, particles 0.0004 millimetre in diameter were found to move with a speed of 0.0038 millimetre a second; those 0.0009 millimetre in diameter, 0.0033 millimetre a second; and those 0.0013 in diameter, 0.0027 millimetre a second. The velocity increased slightly with temperature, and it appeared that motion would cease at -20° C. rather than at the absolute zero. The author believes the motion to be connected with that of the liquid molecules, although this is about 100,000 times greater.

Gravity.—Sterneck (Vienna Academy Sitzungsberichte, 108, 1899) has made observations in mines in Bohemia and Carniola whose results seem to indicate that a downward increase in temperature tends to be associated with an increase in gravity.

Mechanics. Strength of Materials.—Guest (Philosophical Magazine, July), in an investigation of the strength of ductile materials under combined stress, subjected steel, copper, and brass tubes to twisting, tension, and internal pressure, and to various combinations of these. The maximum principal strain was found to be greatest in the simple tension experiments and least either in the torsion tests or when the axial and circumferential tensions are equal. The principal practical conclusion is that a specific shearing stress is a necessary condition for the initial yield of a uniform ductile material.

Elasticity.—Schaefer (German Physical Society, 2, p. 11, 1900) has investigated the elasticity of metals at temperatures as low as the boiling point of liquid air (-186° C.). He finds that the lateral contraction of wires increases with the temperature; that the greater the thermal coefficient of

expansion the higher the temperature coefficient (except with gold); and that lowering the temperature raises the limits of elasticity. The results agree well with those of other experimenters.

Impact.—Vincent (Cambridge Philosophical Society, Aug. 13) finds that when nondeformable spheres impinge on plane surfaces of lead, paraffin, brass, or cast iron with not too great velocity the square of the diameter of the dent is proportional to the velocity. For spheres of the same material and equal velocity the diameter of the dent is proportional to the diameter of the sphere. The volume of the dent is proportional to the energy of motion of the sphere just before impact. For steady loads the square of the diameter of the dent is proportional to the load. The time of impact is directly proportional to the diameter of the ball, other things being equal.

Liquids and Gases. Solution.—Nernst (Göttingen Academy of Sciences, 1, 1900) believes that the validity of the hydrate theory of solution can not be ascertained by study of osmotic pressure or of any other static phenomenon, but only by dynamic phenomena, such as the movement of a third added substance on diffusion or electrolysis. Results of experiments on these lines indicate that hydration in a solution is either entirely absent or takes place only to a limited extent. Rothmund (Zeitschrift für physikalische Chemie, May 18) deduces from experiment that the decreased solubility of nonelectrolytes caused by the addition to the water of various salts is due not to a reaction between the substance and the dissolved salt—which would be accompanied by some heat effect—but to some action of the salt on the water. Zsigmondy (Zeitschrift für physikalische Chemie, April 3) opposes the conclusion arrived at by Stoeckl and Vanino, that the so-called colloidal solutions of metals are merely suspensions. He regards them as real solutions, since they exhibit the peculiarities of such solutions, namely, some osmotic pressure and power of diffusion, concentration without apparent change, separation when the solvent freezes, and impossibility of separation. That colloidal gold solutions give a diffusely reflected light which is elliptically polarized, are precipitated by animal charcoal, and behave toward the electric current like suspensions, is not regarded by the author as conclusive proof that they are suspensions. Schaum (Physikalische Zeitschrift, 1, 1899) has investigated the motion of substances while dissolving, analogous to the well-known motion of camphor in water. The substances dealt with are mostly salts readily soluble in water and dilute acids. The motion is always greater in dilute acid than in water, and its nature is characteristic. The crystal generally moves at first in a zigzag, then changes to a curve, and finally rotates rapidly. The rate of motion depends on the rate of solution. (See also *Double Refraction*, under LIGHT.)

Surface Tension; Films.—Hall (Dublin Royal Society, 9, 1899) shows that the liquor from the settling of the froth of a soap is stronger in soap than the original solution. There must be a concentration of soapy matter after the formation of a film, which agrees with Rayleigh's investigations of the stability of soap bubbles. Donnan (Zeitschrift für physikalische Chemie, Dec. 22, 1899), from experiments on soap emulsions, after comparison with the results of Kraftt on the boiling points of soap solutions with those of Rayleigh on the formation of froth on liquids, and with Hall's observation just mentioned, concludes that surface concentration causes a considerable diminution in the amount of work necessary to increase the surface of separation of an oil and alkali

solution, and that it is to this that the formation of small bubbles is due. Malagoli (Nuovo Cimento, May) produces durable films on skeleton figures by dissolving 40 grammes of gelatin and 10 grammes of soap in 500 of water at a temperature not exceeding 80° C. The films are obtained by dipping the skeletons into the solution and drying for twelve hours. They are not thin enough to show interference colors. Vincent (Journal de Physique, February) believes that a thin film of silver on glass is bounded on both sides by what he calls "transition superficial layers," of a different constitution from the rest of the metal. These in the case of silver are of smaller conductivity and the joint thickness of the two is about 50×10^{-7} centimetres. Quincke (Annalen der Physik, June) combats this idea, and attributes the observed variation of resistance to a variation of density. This author believes that in all cases wedges of solid material are to be preferred to liquid films for the determination of molecular forces.

Condensation.—Barus (Science, Feb. 9) believes that condensation is due always to nuclei primarily, and that whether these are ionized or not is of secondary importance. There is no noteworthy difference between the action of air carrying such dust and that of ionized air.

Air Resistance.—Bryan (Nature, Nov. 30, 1899) describes recent researches of Le Dantec and of Canovetti on this subject. Le Dantec makes the surface under test slide down a vertical wire. The start releases an electric recording device, and the current is broken when the body strikes the buffer at the end of its descent, which occupies 1, 2, or 3 seconds. A surface 1 metre square at a velocity of 1 metre per second experiences a resistance of 81 grammes. The form of the plate is of importance, and the resistance appears to be proportional to the length of the contour. The law that within certain limits the resistance is proportional to the square of the velocity is verified.

Canovetti suspends his bodies from a wire 370 metres in length, stretched along the slope of a hill. The resistance was found to be 90 grammes (instead of Le Dantec's 81). He also tried bodies of the shape of a Challais balloon—a long cone and a hemisphere joined by their bases, enveloped in a net; the resistance was 80 grammes, and largely due to the net.

Gaseous Viscosity.—Jäger (Vienna Academy Sitzungsberichte, January–March) finds that the path over which a molecule carries a definite amount of momentum exceeds its mean free path by the diameter of a molecule at most, and is only one half this on the average. As the viscosity is proportional to this path, it is also a function of molecular diameter, and when this becomes very large the viscosity approximates to infinity. The author shows this more exactly by formulæ.

Explosive Waves.—Le Chatelier (Comptes Rendus, June 25) shows by photographic methods that in various explosive mixtures ignited by an electric spark the speed of propagation of the flame at once assumes a value of several hundred metres a second, and rapidly increases to beyond 1,000. Shortly after the appearance of the flame the explosive wave, with a greater and uniform velocity, is suddenly formed. The distances traveled by the flame before the formation of the explosive wave vary from 1 decimetre to 1 metre. The greatest observed velocity of the explosive wave was 2,920 metres per second. Vieille (Comptes Rendus, Dec. 26, 1899) finds that explosives are not necessary to produce waves of

velocity much higher than that of sound. When air is shut off by a collodion diaphragm at the end of a tube, and is compressed by a piston, the wave generated when the collodion bursts has a very high velocity. Some such diaphragms will burst at a pressure of 27 atmospheres, and the wave is then propagated faster than 600 metres per second. The rate decreases by about 20 metres per second for every metre traversed, until it becomes the ordinary velocity of sound. (See also *Temperature of Flames*, under HEAT).

Efflux of Gases.—Emden (Wiedemann's *Annalen*, October, 1899) has developed the mathematical theory of the efflux of gas under pressure, starting from the position that, if the efflux is steady, equal masses and equal quantities of energy must pass the space between two cross sections of the tube in each unit of time. He arrives at the following important generalizations: The velocity with which the gas passes the orifice can never become greater than the velocity of sound at that point. The pressure at which a jet begins to pass the orifice with this velocity corresponds to the velocity of efflux at which stationary sound waves are formed in the jet. In this manner sound waves of very small wave length and very high frequency may be formed, possessing greater energy than any yet produced.

Acoustics. Velocity of Sound.—Witkowski (Bulletin of the Cracow Academy of Science, 16, p. 138), by experimenting with compressed air by Kundt's method at various temperatures and pressures, has shown that the velocity of sound varies with the pressure, the variation being greatest at the lowest temperatures. At zero the velocity slowly rises with the pressure, being about 10 per cent. higher at 100 atmospheres than at 1 atmosphere. At 100° the velocity remains nearly the same at all pressures, while at -130° it rapidly falls with increasing pressure. Brillouin (*Annales de Chimie et de Physique*, 18, 1899) shows mathematically that when the transmission of sound with its condensations and rarefactions takes place in a mixture of gases, gaseous diffusion must be taken into account, as it causes variations in composition of the medium.

Pitch.—Koenig (Wiedemann's *Annalen*, November and December, 1899) finds that Kundt's dust figures can be used to determine pitches high above the limits of audibility. The fork *c'*, placed at the mouth of a tube with a length of some 95 semi-wave-lengths, and a diameter of about one semi-wave-length (11 millimetres) gives very clearly defined figures. The method is available up to f (90,000 complete vibrations per second), a pitch which is more than an octave above the extreme limit of audibility. The method of beats ceases to be practically available two octaves below that limit.

Phonography.—Mauro (Journal of the Franklin Institute, July) describes a modification of Bell and Tainter's graphophone in which undulations of greater amplitude are insured by increasing the velocity of the style. The style is set at a more acute angle, and the diameter of the cylinder is increased. The increase in velocity also prevents the shank of the style from coming into contact with the wax and so checking the vibration.

Heat. Thermometry.—Holborn and Day (American Journal of Science, September, 1899) find that up to 500° C. thermometer bulbs of Jena borosilicate glass No. 59¹¹¹ with inclosed hydrogen prove most satisfactory, no appreciable changes in the zero point being shown after repeated heatings. Callendar (Philosophical Magazine, December, 1899) advocates the adoption of

a new practical temperature scale, to be known as the "British Association Standard." According to this standard any temperature, t , would be defined by the equation $t - pt = dt(t - 100)$, where $pt = 100 (R - R_0)/(R_{100} - R_0)$ and d is a constant, R , R_0 , and R_{100} being the electrical resistances of a particular platinum wire at t , 0° and 100° C. respectively, and the value of d being obtained by taking the boiling point of sulphur under 76 centimetres of mercury at 0° C. as 444.53° C. This scale is subject to far less uncertainty, especially at high temperatures, than that practically obtained with gas thermometers as at present constructed and used; it is easily and accurately reproducible, and is a close approximation to Kelvin's absolute scale.

Conduction.—Smolan (Vienna Academy) states that at the boundary between a solid and gas, across which a flow of heat takes place, there is an abrupt change of temperature. When the whole temperature difference is small this may be expressed as an imaginary length added to the thickness of gas through which conduction is taking place. These lengths in different gases are proportional to the mean free path, being 6.98 times as long for hydrogen as for carbonic acid, and 1.70 time for air.

Radiant Heat.—Planck (*Annalen der Physik*, April) endeavors to find an expression for the entropy of radiant heat which is in agreement with all the data of thermodynamics and of the electromagnetic theory of light. He also arrives at a numerical value of the temperature of a monochromatic radiation emitted by a small surface and refracted by a system of centric surfaces. The temperature of the radiation is completely defined without reference to that of the body which emits it, or to the losses suffered on the way. It is more rational, the author thinks, to speak of the temperature of a monochromatic beam of sunlight than of the temperature of the sun. Liesegang (*Physikalische Zeitschrift*, April 14) has succeeded in making a paper sensitive to long heat waves by painting it with equal quantities of hydroquinone and anhydrous sodium carbonate, mixed with a little alcohol. On exposure to the radiation of a gas stove the blue color of this paper is completely bleached in five seconds, and shadow pictures of coins can be obtained. Kurlbaum (*Annalen der Physik*, July) finds that the temperature of the surface of a radiating body is by no means that of the interior, as is usually assumed. With a sheet of blackened platinum foil 1 μ thick the difference of temperature is 0.016° when the sheet is heated 4° above its surroundings.

Convection.—Bénard (*Comptes Rendus*, April 9 and 17) finds that a thin layer of liquid heated uniformly from below may assume a stable condition in which it becomes divided into regular polygonal prismatic cellules, in each of which the liquid ascends along the axis and descends along the outside. The forms have remarkable permanence and perfection.

Specific Heat.—Magie (Physical Review, August, 1899) shows theoretically that the osmotic pressure of a solution is equal to its latent heat of expansion, and also points out the special cases (four in number) where the specific heats of the solvent and of the solute in a solution are constant at all concentrations.

Ebullition.—Speyers (American Journal of Science, May) shows that if we know the molecular aggregations of the constituents in a homogeneous mixture of two liquids it is possible to plot the boiling-point curve of such a mixture. The equation employed is $n/(N+n) = (p-p')/d$

where $p-p'$ is the diminution in vapor pressure produced by the addition of n molecules of one liquid to N molecules of the other. Ryland (American Chemical Journal, November, 1899) has examined 80 binary mixtures of liquids mutually soluble in all proportions and two mixtures of liquids whose mutual solubilities are limited. Forty-five of the former give distillates which boil at a constant temperature, the ratio of the components then being nearly that of the products of the vapor densities and vapor pressures of the pure liquids at that temperature. Both of the latter mixtures form distillates with the like property so long as there are two layers of liquids in the distilling flask; these distillates are, however, not true chemical compounds.

Freezing.—Wildermann (Zeitschrift für physikalische Chemie, Dec. 1, 1899), in experiments on the freezing points of dilute solutions, has obtained the following results, among others: When the freezing point is depressed by about 0.02° needles or flakes of ice separate throughout the solution, but if the depression is only a few thousandths the ice separates in bands or in a continuous cap on the bulb of the thermometer. The freezing point of water, freed from ammonia and carbon dioxide by a current of pure air, varies to a noticeable extent owing to the presence in it of a variable amount of dissolved oxygen and other nonelectrolytic matter. He shows how to calculate the difference between the observed (or apparent) freezing point and the real freezing point. The error varies, according to methods, from 0.00002° C. to 0.004° C.

Temperature of Flames.—Mache (Vienna Academy Sitzungsberichte, 108, 1899) has investigated the temperature gradient in a homogeneous mixture of burning gases, such as a detonating mixture of oxygen and hydrogen. An explosion travels with definite velocity along a tube so filled, the gases on one side of the burning surface having the temperature of combustion, on the other that of ignition. The transition is abrupt. The author shows that the temperature decreases rapidly away from the burning surface, being 600° at 12 centimetres distance, 200° at 65 centimetres, and 50° at 22 centimetres.

Light. Theory.—Sagnac (Comptes Rendus, Nov. 13, 1899) considers the luminous vibrations in the interior of a body as being propagated by the intervention of a medium identical with the ether of a vacuum, and differing from it neither in density nor in elasticity. The phenomena usually referred to mechanical reactions between the ether and matter are explained by taking account of the discontinuity of matter. Carvallo (ibid., Jan. 8) doubts the truth of the received theory that white light is due to a damped vibration. If this were the case, he asserts, the grating spectrum would give white light over its whole area. The accepted theory neglects radiation which, although insensible to the eye in isolated regions, become of notable amount in the case under consideration. Gouy (ibid., Jan. 29) criticises these contentions. He acknowledges that the resolution of white light into simple vibrations is purely fictitious, but maintains that it enables us to calculate the total energy spent between two given epochs. Damped oscillations form a workable hypothesis, although not the only one.

Standards.—From the results of his work on standards of light, Petavel (London Royal Society, 65, p. 469) states that the probable variation in the light emitted by molten platinum under standard conditions is not above 1 per cent., and the accuracy of this standard is capable of being increased.

Brightness.—Lummer and Kurlbaum (German Physical Society, 2, 8, 1900) find that the ratio of the brightnesses of two hollow platinum vessels at different temperatures is equal to the ratio of those temperatures, taken on the absolute scale, raised to a power that grows less as the temperature increases.

Reflection.—Hagen and Rubens (Annalen der Physik, February) have determined the reflective powers of various metals and of glass mirrors for the various rays of the visible spectrum by a photometric method. As a general rule, the reflective power of metals increases with the wave length of the light. Thus the reflective power of gold for rays of wave length 700 is the same as that of silver.

Double Refraction.—Hill (Philosophical Magazine, December, 1899) has studied the double refraction introduced in solutions of colloids, such as gelatin and gum arabic, by stirring, and concludes that such solutions are not true solutions in the proper sense of the term, since their behavior is much more like that of an elastic solid, as they are able to sustain strains if not distorted too much. He believes that their structure is similar to that of jellies.

Interference.—Lummer (Berlin Academy, May 3) has studied the phenomena observed when one looks at a bright surface through two right-angled prisms placed with their hypotenuses together, but separated by a thin film of air, and with the eye focused for parallel rays. A system of interference fringes is seen parallel to the line bounding the area of total reflection, and the author has discovered that in reflected light two systems of fringes are obtained, one complementary to the other.

Polarization.—Forchheimer (Zeitschrift für physikalische Chemie, July 3) has proved experimentally the substantial truth of Perkins's view that the behavior of salts with relation to electromagnetic rotation of the plane of polarization is analogous to that of the corresponding acids. Solutions of the sulphates of ammonium, sodium, and magnesium resemble sulphuric acid in having the molecular rotation independent of the concentration, and the same is true of hydrochloric acid and various haloid salts; but with both the sulphate and the chloride of lithium the rotation increases with the dilution, a property that seems to be peculiar to lithium salts. (See also *Fluorescence*, just below.)

Dispersion.—Schmauss (Annalen der Physik, June) finds that the general form of the law of optical dispersion can also be applied to the dispersion observed in the Faraday effect, so that the magnetic-rotatory dispersion shows discontinuities near the absorption bands of certain substances, just as the optical dispersion does.

Phosphorescence.—C. C. Trowbridge (Science, Aug. 25, 1899) finds that the reduction of the temperature of a phosphorescing substance is accompanied by a corresponding decrease in the phosphorescent discharge; that very low temperatures cause phosphorescence to linger long enough to be readily observed in substances not visibly phosphorescent at ordinary temperatures; and that the production of phosphorescence is less when excitation occurs at low temperatures.

Fluorescence.—Hewitt (Chemical Society Proceedings, Jan. 24) finds that the molecules of fluorescent substances are probably those capable of vibrating in two different periods. Fluorescent coloring matters exhibit tautomerism almost without exception. Schincaglia (Nuovo Cimento, September, 1899) finds that in isotropic substances the light of fluorescence is never po-

larized; in crystals it generally presents only traces of polarization, except in topaz, in which it is completely polarized. Fluorescence of crystals depends usually upon chemical impurities, probably distributed in accordance with structure. The color of a crystal has no influence upon fluorescence, except to affect the color. A magnetic field has no effect upon the color of the fluorescent light, and causes nothing analogous to the Zeeman effect.

Becquerel Rays: Nature and General Properties.—M. and Mme. Curie (Comptes Rendus, Nov. 6, 1899) find that the rays from strongly radio-active substances are able to communicate radio-activity to substances that are ordinarily inactive, and that this induced radio-activity persists for a considerable time. The effects seem not to be due to traces of radio-active matter carried on to the exposed plate, but an induced radio-activity appears to exist, which is a sort of secondary radiation due to the rays of Becquerel. Becquerel (Comptes Rendus, June 11) notes that two different kinds of the rays bearing his name have up to the present time been discovered. One resembles cathode rays and is deflected both by magnetic and electric forces. The other is deflected by neither, and is absorbed in various degrees by metals and other opaque substances. Radium emits both, polonium only the second, and actinium only the first. It seems probable that uranium has a definite though feeble radiation of its own. Villard (Comptes Rendus, April 30) has shown the heterogeneous nature of the rays given out by radium preparations, by allowing such rays to pass through a slit in a lead plate, and to impinge at nearly grazing incidence upon two sensitive plates laid one over the other and wrapped in black paper. The rays are exposed to a strong magnetic field. On development the upper plate shows two impressions—one deviated and spread out, the other feebler, but absolutely rectilinear and sharp. On the lower plate only one impression is visible—that due to the nondeflected rays. The author calls the two classes of rays simply X rays and cathode rays. Mme. Curie (Comptes Rendus, Jan. 8) finds that the rays are more easily absorbed when they have already penetrated an absorbing layer than when they have not, which is due to the absorption of the less penetrative rays in the first layers. Behrendsen (Annalen der Physik, June) finds that when a radium preparation is cooled to the temperature of liquid air its radio-activity is reduced by more than one half. On heating again to the normal temperature a slight increase was observed. Elster and Geitel (Wiedemann's Annalen, November, 1899) find that the rays of radium convert a spark or brush electric discharge into a violet glow, acting sometimes at a distance exceeding one metre.

Becquerel Rays; Magnetic and Electrostatic Deflection.—Becquerel (Comptes Rendus, Dec. 11, 1899) finds that the rays known by his name when they pass along the lines of force of a powerful magnet are contracted to a focus. When the rays pass across the lines, after proceeding upward from the source, they curve round like projectiles and impinge upon the plate along a curve extending from one pole to the other and bending out of the way of the radiant substance in the center. These properties are analogous to those of cathode rays. The same writer (ibid., Dec. 26, 1899) finds that the magnetic deflection of the rays is a property varying from one radiant preparation to another. Polonium preparations show no traces of it in the most powerful field, whereas radium shows very distinct mag-

netic deflection. The difference between Röntgen and Becquerel rays may thus be, after all, quantitative rather than qualitative. Absorption and magnetic deflection appear to be connected in some way. Curves obtained in photographic experiments show that the speed of propagation of radium radiation is of the order of the speed of rotation communicated by a magnetic field of about 4,000 units. This is probably very near the velocity found for cathode rays. Curie (Comptes Rendus, Jan. 8) shows that the behavior of Becquerel rays in a magnetic field varies according to the mode of preparation of the radio-active substance. Those that have most penetrative power are most easily deflected. M. and Mme. Curie (Comptes Rendus, March 5) find that the magnetically deflected rays of radium compounds resemble cathode rays rather than Röntgen rays, not only in magnetic deflection, but also in conveying a negative electric charge. Even after traversing a thick-walled leaden box covered with a piece of aluminum foil, and also an ebonite layer 0.3 millimetre thick, the rays conveyed a current of the order of 10^{-11} ampère through the galvanometer connected with the inclosed electrode. Strutt (Proceedings of the Royal Society, 66, March 3) attempts to compare the magnetic deflections of Röntgen, Becquerel, and cathode rays. He reports that with a field of 3,270 C. G. S. units no perceptible deflection of Röntgen rays is obtained, and that to produce a curvature of radius 1 centimetre in the rays would require a field of at least 60,000,000 units. Thomson has found that to produce the same curvature in cathode rays a field of only 315 units is required. Becquerel rays stand between Röntgen and cathode rays in this respect, a radius of 1 centimetre requiring 5,000 units. Dorn (Physikalische Zeitschrift, May 5), in experiments on the behavior of radium rays in an electric field, has shown that the rays always deviate toward the positive plate of a condenser, like cathode rays. The observed displacement agrees fairly well with that calculated on the supposition that the rays consist of electrically charged masses moving with great velocity.

Induced Radio-activity.—Rutherford (Philosophical Magazine, January) finds that thorium, besides ordinary Becquerel rays, continuously emits radio-active particles of some kind, which retain their powers for some minutes. This emanation ionizes gas in its neighborhood, and can pass through thin layers of metals and considerable thicknesses of paper. It is also unaffected by bubbling through water or sulphuric acid. It can not be vapor of thorium, for the emanation from thorium oxide was not sufficient to appreciably alter the pressure of the gas in an exhausted tube, and the spectrum of the gas was unchanged. The same writer (ibid., February) finds that thorium compounds produce radio-activity in all solid substances in their neighborhood if the bodies are uncharged. With charged conductors the radio-activity is produced on the negatively charged bodies. In strong electric fields the radio-activity can be concentrated on the surface of thin wires. The radiation excited is homogeneous and more penetrating than the radiations from thorium or uranium. It is confined to the surface of the substance, and is independent of whether the substance is a conductor or not, and of the nature of its surface. The intensity of the induced radiation falls off in geometrical progression with the time, decreasing to half value in about eleven hours. With time of exposure the induced radio-activity at first increases nearly proportionally, but tends to a

maximum value. Mr. Rutherford suggests three possible explanations: (1) A kind of phosphorescence excited by the radiation; (2) deposition of the positively charged gaseous ions produced in the gas; (3) deposition of particles of a radioactive material emitted by thorium compounds. The first appears insufficient, and between the others the evidence is not conclusive, though the last seems somewhat more tenable. (See also *Röntgen Rays*, under **ELECTRICITY**.)

Magneto-optics.—Larmor (Cambridge Philosophical Society Proceedings, 10, 1899) points out that the Faraday effect may be deduced from the Zeeman effect by general reasoning, without introducing any special dynamical hypothesis. Voigt (*Annalen der Physik*, February) also has extended his magneto-optic theory, which involves very complicated formulæ. Reese (*Electrical World and Engineer*, Aug. 18) has attempted to determine whether the separation of the spectral lines in the Zeeman effect is strictly proportional to the strength of the field. Photographs show that it is very nearly so with sharp triplets, less so with sextuplets, and still less with diffuse triplets, the separation increasing less rapidly with the field when the latter becomes very intense.

Spectroscopy.—Beckmann (*Zeitschrift für physikalische Chemie*, Sept. 7) obtains colored flames for spectroscopic work by first forcing air through the pores of a porcelain tube impregnated with the salt to be examined and then passing it through a Bunsen flame. With aqueous solutions the necessary pressure is from 1.6 to 2 atmospheres, but with alcohol, acetone, or acetic acid it is only about half as great. Cantor (*Annalen der Physik*, March) finds by experiment that there is no perceptible absorption of the light from an electric arc by glowing gas in a vacuum tube. As by Kirchhoff's law the ratio of the emission to the absorption equals the emission of a black body at the same temperature, the glowing gases should have an extremely high temperature. But since they have not, Kirchhoff's law does not hold for electrically glowing gases.

Microscopy.—Deschamps (*Comptes Rendus*, April 30) has given the name telemicroscope to an instrument which enlarges by about 12 diameters objects placed at a distance of 25 centimetres. It thus enables the observer to study insects without disturbing them from their normal surroundings. The objective consists of two Dollond achromatic lenses separated by a distance less than the focal length of the most converging lens. The eyepiece is a lens of short focus, chosen so as to give the maximum enlargement and field. The depth of focus of the instrument is very great, and it gives effects of relief similar to stereoscopic effects.

Phototropy.—This name is given by Marckwald (*Physikalische Zeitschrift*, 1, 1899) to change produced by light when the removal of the active rays cause the substance acted upon to return to its original condition. A new example is afforded by chino-chinolin, whose yellow crystals become green in the light, but turn yellow again in the dark. Direct sunlight changes them in a few seconds; diffuse daylight in several minutes. The rate of return depends on temperature.

Electricity. Electrification.—Ebert and Hoffmann (*Annalen der Physik*, August) find that ice acquires a positive charge by friction with a metal and imparts a negative charge. The colder and drier it is, the greater this action. This may account for the electric effects of polar snowstorms, including atmospheric luminescence and even the aurora; and the phenomenon should be

allowed for in all experiments with liquid air, which usually carries minute particles of very cold ice suspended in its vapor. Campetti (*Academy of the Lincei*, July 15) finds that when a crystal of a salt is dropped into water, or into its own nonsaturated solution, the surrounding liquid becomes negatively charged, and the crystal positively charged. This he believes to be due to the fact that the negative ions fly off more rapidly than the positive. The resulting charges accelerate the outflow of the positive ions and retard the others, so that there is a tendency to equalization, but on the whole the liquid is negative to the crystal. The results of an investigation of the masses of ions undertaken by J. J. Thomson (*Philosophical Magazine*, December, 1899) suggest that the ionization of a gas consists in the detachment from the atom of a negative ion—the same for all gases—whose mass is only about $\frac{1}{100}$ of the mass of an atom of hydrogen. This negative ion may be the fundamental quantity in terms of which all electrical processes can be expressed. In an electrical theory embodying this conception the atom would be regarded as containing a large number of similar bodies, which Thomson calls "corpuscles." The mass of a corpuscle is about 3×10^{-28} grammes. In the normal atom this assemblage of corpuscles is electrically neutral. The electrification of a gas may be the detachment of a corpuscle from some of the atoms. The remainder of the atom forms the positive ion, and is of course of much greater mass. An atom might be split up indefinitely but for the fact that each detachment of a corpuscle increases the free positive charge of the remainder, and so increases the force of cohesion.

Dissipation of Charge.—Pochettino and Sella (*Academy of the Lincei*, July 1) conclude that the evaporation of a charged liquid does not dissipate the charge, thus confirming the conclusions of Schwalbe and controverting those of Pellat. When the surrounding air is kept dry the addition of water to a zinc plate reduces the rate of dissipation instead of adding to it. Elster and Geitel (*Annalen der Physik*, July) find that the dissipation of an electric charge is due to ions in the atmosphere, and that it is reduced by fog, smoke, and dust. It takes place equally for positive and negative charges, except at great altitudes, where the rate may be two to ten times greater for the negative than for the positive. The authors believe that the higher strata of the air are ionized by the sun's rays, the ultra-violet rays, which produce this effect, being reduced in the lower strata by absorption.

Continuous Discharge.—Toepler (*Annalen der Physik*, July) finds that there may be four different forms of continuous discharge in air—glow, brush, brush-arc, and flame-arc. Each may be either positive or negative. Usually an increase in the strength of the current brings about a change from glow to brush, and then to brush-arc. The author believes that so-called "globe lightning" or "ball lightning" is due to a continuous discharge analogous to the brush-arc, the way for which has previously been cleared by a discontinuous discharge of ordinary or "forked" lightning. The luminous globe is simply a portion of the continuous track where there is a particularly steep gradient of potential, and its motion may be due to electrostatic forces or to the motion of the air, carrying the whole track with it. Generally the phenomenon ends with another discontinuous or spark discharge, and the resulting detonation is ascribed to the "bursting" of the ball. The current intensity may be as high as 10,000 amperes, but usually does not

exceed 5 ampères, and probably a faintly luminous globe as large as one's head might be formed with a current as weak as 0.01 ampère. Leduc (*Eclair Électrique*, Oct. 28, 1899) reports that fine polished metallic points from 5 to 10 centimetres apart, at right angles to a photographic plate or glassy gelatino-bromide paper, and connected with an electrostatic machine, will, especially if the paper rest upon a piece of glass and this upon a plate of metal, produce an effluvium round the positive and a luminous globule at the negative point. When the globule has attained a certain size it detaches itself from the negative point (which becomes dark), and travels over the plate or paper, by a more or less irregular path, sometimes dividing as it travels, toward the positive point. When it reaches this, all luminosity is extinguished and the charges disappear as if the terminals of the machine had been connected by a conductor.

Discharge by Flame.—Villard (*Comptes Rendus*, Jan. 15) asserts that a flame placed in an electric field acts as a bundle of Röntgen rays, cutting the lines of force, and the gases produced by the combustion are active like Röntgenized air. In the absence of an electric field the flame is inactive and the gaseous products, transported into an electric field, produce no discharge. It is as if in ordinary air the incandescent particles gave out cathode rays, while in a field they gave out Röntgen rays; or rather analogues to these. This way of looking at the facts is believed by the author to explain a very large group of phenomena, including flame discharges, discharges by incandescent bodies and phosphorus, the radiations given out by electric sparks, especially from the cathode end, discharge by ultra-violet light, the Edison effect (current between the positive end of the filament of a glow lamp and an electrode fused into the lamp), and the production of ozone by flames, incandescent bodies, the electric arc and sparks, by the oxidation of phosphorus in the cold, and by radium.

Spark Discharge.—Ruhmer (*Elektrotechnische Zeitschrift*, Feb. 22) finds two distinct forms of discharge with a Wehnelt interrupter and a spark gap between a point and a disk. At large distances single strong sparks cross the gap, while at short distances a curved flame crosses from the point to the disk. At intermediate distances a large number of thin spark lines branch out from the point and extend toward the disk like a brush. Every one of the lines has a sinusoidal wave shape, due to a spiral form of the spark path. By chronophotography it is seen that the sparks are similar in outline, but are successively displaced in the direction of the disk. West (*ibid.*, Oct. 26, 1899) has made a photographic analysis of spark discharges from a Wehnelt interrupter by means of a "mutograph" in which the film moved continuously at a rate of 1 to 7 metres per second. The sparks traveled along approximately the same paths during successive discharges, but did not succeed each other regularly. Their diameter is not uniform, and they are frequently brighter in the middle than at the ends. Some of the sparks are double or multiple—an appearance due to several sparks in rapid succession, as shown by their tracks. Continuous current sparks do not show these doublings or branchings. Abraham and Lemoine (*Comptes Rendus*, Jan. 29) measure the duration of the electric spark by a method already devised by them to test for a retardation in the disappearance of the Kerr phenomenon. The total light emitted by the spark is less than 40 times that emitted during the cessation of the Kerr effect, and as this latter has been proved not to

exceed 0.01 micro-second, the spark probably does not last more than 0.4 micro-second.

Electric Arc.—Child (*Physical Review*, March) discusses Brown's discovery, made by photography, that the arc is formed by the coalescence of two light fronts, starting from the positive and negative carbons respectively, the positive one moving with the greater velocity. This is accounted for by the author on the supposition that the negative ions move more slowly than the positive ions—the reverse of what happens in the case of dissociation by Röntgen rays. The greater velocity of the positive ions would not only explain the fact observed by Brown, but also the greater fall of potential at the positive pole. Mrs. Ayrtton (*Journal of the Institute of Electrical Engineers*, 28, p. 400), after many experiments to determine the cause of the hissing of the electric arc, concludes that it is caused by air coming in contact with the crater, and is due to the carbon's burning instead of volatilizing.

Electric Conduction.—Drude (*Physikalische Zeitschrift*, Jan. 6) states that the view that metallic electric conduction is due to the transportation of ions leads to a simple explanation of the optical characters of metals. If the current be regarded as due to the wandering of ions of constant mass and constant charge, there must be several kinds of these—two at least. As the result of a mathematical investigation, he concludes that the relative masses of the different kinds in a particular metal may be determined from its optical properties. In the case of nickel they are as 9.45 to 1. The same writer (*Annalen der Physik*, March) elaborates an electron theory of metals. It is not necessary, he thinks, to attribute ponderable mass to an electron in order to be able to attribute kinetic energy to its motion, and a certain inertia, as exhibited in the magnetic deviation of cathode rays and the optical qualities of metals. The absence of a ponderable mass attached to the electron makes it possible to bring metallic and electrolytic conduction under the same theory. The assumption that the ratios of charge to mass in the positive and negative electrons respectively are two absolute constants in all metals is not in agreement with the optical behavior of the latter. In gold and copper it is necessary to assume the presence of bound electrons, having a certain position of equilibrium in the body, and bound to the material particles. It is these bound electrons which play a part in optical processes. The author assumes the existence of different kinds of electrons with various charges, each a multiple of an elementary charge. These movable electrons or "nuclei" obey the kinetic theory of gases. Positive and negative electrons do not coalesce, owing to their high kinetic energy, as in the case of a comet which never returns to the solar system. The author investigates contact electricity and thermo-electricity, with the aid of his theory, and believes that all galvanic and thermo-magnetic effects may be explained and calculated with its aid. Lodge (*Philosophical Magazine*, May) suggests that conduction in the metals is due to passage of isolated charged corpuscles from one atom to the next. This does not cause any chemical change, because each atom on gaining one negative corpuscle loses a similar one. In electrolytes, however, the charged corpuscles drag their atoms with them, so that chemical changes occur. Reinganum (*Annalen der Physik*, June) finds that the ratio of the conductivities of a metal for heat and electricity respectively may be calculated from the electrochemical equivalent and the velocity of gaseous hydrogen atoms. He obtains thus the value

0.7099×10^{-10} , which agrees remarkably well with those found by experiment, such as that found by Jäger and Desselhorst for aluminum (0.706×10^{-10}). The author believes that the principles of the kinetic theory of gases may be applied also to liquids and to metals.

Resistance.—Lussana (Nuovo Cimento, August, 1899), in researches on the resistance of metals and alloys when immersed in oil and subjected to pressures up to 1,000 atmospheres, finds that with increasing pressure the resistance diminishes, tending to a minimum value at very high pressures. If sufficient time elapse between the compression and the measurement of the resistance—usually an hour—the curves taken with increasing and diminishing pressures are practically coincident. The coefficient is much smaller for the alloys than for the pure metals. The author concludes that the specific resistance of a metal depends not only on the proximity of the molecules, but also on their velocity of vibration.

Vacuum Tubes.—Wilson (Philosophical Magazine, June) studies potential gradient in a vacuum tube by means of a newly invented probe capable of being shifted to any part of the discharge. The discharge passes through a Torricellian vacuum, and an open glass tube containing the two electrodes floats on the mercury, whose surface can be raised or lowered by means of an India-rubber tube. Thus the vacuum tube proper floats up and down in the vacuum, and through a slit in its side the probes fixed into the side of the barometer tube are capable of entering. Among other results, the author finds a sudden drop of potential near the anode, often amounting to as much as 35 volts. He attributes it to the great rate at which positive ions are shot off from the anode. Phillips (Electrician, Sept. 29, 1899) finds that when the electrodes in an exhausted bulb are magnetized after the passage of the discharge at suitable pressure, the discharge being at the same time shut off, rotating luminous rings appear in the bulb in planes perpendicular to the axis. Kelvin (ibid., Aug. 4) explains these by supposing that after the current is shut off the space is filled for some time with negatively electrified particles, remaining scattered through the inclosure. Each of these must, during the initiation of the magnetic field, experience an electrostatic force proportional to its distance from the axis of the field, and in a direction perpendicular to the axis. This is just what is required to explain the rotating rings. Wien (Physikalische Zeitschrift, 1, 1899) has undertaken an investigation to see whether the radiated energy due to electric discharge in gases can be measured by the difference between the electric energy supplied to vacuum tubes and the heat produced in the tubes. The results show that within the limits of experimental error the electrical and heat energy are equal. Bouty (Journal de Physique, January) agrees with Wiedemann that a rarefied gas can not be regarded as a true electrolyte. He finds that the apparent conductivity of a rarefied gas is related to its luminescence, and is directly connected with a violent action that follows dielectric equilibrium, as the rupture of a stretched wire follows its elastic equilibrium when the stretching force exceeds a certain limit. The ether in a perfect vacuum possesses perfect dielectric elasticity, but gaseous molecules introduce weak points into it.

Cathode Rays.—Starke (Annalen der Physik, September) has attempted to measure the direct force exerted by cathode rays when they strike on light, movable bodies. The results of Riecke, who estimates the force from the motion of a propeller-shaped cathode, would show an amount of energy

surpassing the whole amount possessed by the rays, and such estimates are therefore inadmissible. The author used a fixed propeller-shaped cathode from whose blades the rays impinged upon suspended aluminum plates. The results were almost entirely negative, except that a very powerful influence machine gave a deflection indicating that the force to be measured is less than 10^{-4} dynes.

Röntgen Rays (see also *Berquerel Rays*, under LIGHT).—Graetz (Annalen der Physik, April) believes that the rotations produced in vacuum tubes under the action of cathode rays may not be directly due to the impact of projected particles, since they appear at low pressures before the cathode rays, and they cease at exhaustions at which these rays are still present. The author has also discovered that light dielectric bodies, under suitable conditions, rotate rapidly when exposed to Röntgen rays. Small spheres, bells, and vanes mounted on needle points in an electric field traversed by Röntgen rays continue to rotate while the rays continue, the direction depending upon the initial tendency. The rotations are strictly analogous to those described by Quincke in the case of liquids, and are covered by Heydweiller's theory. Trowbridge (American Journal of Science, June) has succeeded in generating Röntgen rays by means of a battery current, using 20,000 storage cells with an electro-motive force of more than 40,000 volts. The advantage of this method is the possibility of exactly regulating the current and difference of potential necessary to excite the rays, which is not possible with any other method. Zeleny (Philosophical Transactions, Nov. 9) determines the velocity of ions produced by Röntgen rays by comparing it directly with that of a stream of gas. In a field of one volt per centimetre the following velocities in centimetres per second were obtained:

MEDIA.	Positive ions.	Negative ions.
Dry air.....	1.36	1.87
Moist air.....	1.37	1.51
Dry oxygen.....	1.36	1.80
Moist oxygen.....	1.29	1.52
Dry carbonic acid.....	0.76	0.81
Moist carbonic acid.....	0.62	0.75
Dry hydrogen.....	6.70	7.95
Moist hydrogen.....	5.30	5.60

Campanile and Ciomme (Physikalische Zeitschrift, June 23) find that at all potentials the discharge of a condenser is accelerated by X rays, though they are more effective at lower potentials. Blythwood and Marchant (Proceedings of the [London] Royal Society, 65, 1899) show that the absorption of Röntgen rays produced by normal aqueous solutions of metallic salts having the same acid radical increases with increase of atomic weight of the base. Wind (Wiedemann's Annalen, August, 1899) denies that it follows from the low wave lengths obtained from diffraction images that the rays are really 3,000 times shorter than those of yellow light. He asserts that diffraction images like those obtained can also be produced by proper vibrations of any frequency, even that of ordinary light, if only these vibrations experience quite irregular changes of phase, with intervals between them corresponding to the frequencies resulting from the diffraction phenomena.

Dielectrics.—More (Philosophical Magazine, August), in opposition to the results of Röntgen, Quincke, and others, finds that no changes of volume and length are observed when dielectrics are placed in an electrostatic field. Bouty (Comptes Rendus, Aug. 20 to Sept. 10) has measured the dielectric cohesion of gases at various pressures by observing the value of the uniform

field between condenser plates, at which electricity first passes. He finds that hydrogen is a worse insulator than air or carbon dioxide at high pressures, but a better one at low pressures. Water vapor in itself (apart from deposited films of moisture) insulates perfectly. As between different gases, the critical value of the potential gradient has an absolute term that is nearly the same for all, and a term proportional to the pressure whose coefficient varies from gas to gas; but it does not seem to be related either to the mean free path or to the specific inductive capacity. The author attributes this discrepancy to the fact that other experimenters used systems of rigid recording levers which interpreted mere distortions as alterations in length. In his own observations he used optical methods.

Coherence.—Härden (Elektrotechnische Zeitschrift, April 5) has constructed a coherer capable of observation under the microscope and consisting of two fine adjustable wires. When steel wires were approached to 0.006 millimetre from each other, while sparking under the action of electric waves, a dark bridge sprang across between them, and then the galvanometer indicated a current. Little particles of metal could be observed passing from the one wire to the other previously to the formation of the bridge, which was destroyed by shaking. Guthe and Trowbridge (Physical Review, July), from experiments on ball coherers, conclude that the high initial resistance of a coherer may be attributed to the presence on the surface of the metallic particles of a film (possibly of condensed water vapor) through which electrolytic action occurs. Balls of 3 to 10 millimetres diameter were used, of steel, lead, phosphor-bronze, and copper-plated steel. Bose (London Royal Society, Aug. 4) finds that contact sensitiveness to electric radiation differs with different chemical substances, and is a periodic function of the atomic weight. Continued radiation produces such a molecular change in the substance that it becomes less sensitive, whether the sensitiveness is in the direction of increase or diminution of resistance. In certain cases this diminution may go so far as to reverse the direction of sensitiveness. So-called "fatigue" appears to be due to the presence of radiation products.

Contact Electro-motive Force.—Lodge (Philosophical Magazine, May) maintains that contact force is due to the action of oxygen on the two metals. It is not necessary, he says, to assume any actual chemical combination, but only an extremely minute approach of the oxygen atoms toward the zinc, and a recession from the copper.

Hall Effect.—Moretto (Nuovo Cimento, April) finds that for strengths of field from 3,200 to 9,600 C. G. S. units the Hall effect is proportional to the strength of field, but that it diminishes proportionally to that strength as the strength further increases. The effect is approximately proportional to the current down to 0.04 ampère, but is relatively greater for lower intensities. The effect is of the same order of magnitude with discharge currents as with continuous currents. Marx (Annalen der Physik, August) has succeeded in finding an appreciable Hall effect in gases, which is contrary to the modern ionic theory. He used a flat Bunsen flame. The effect in electrolytes he believes will remain too small for measurement.

Electrostatic Inductance.—De Heen (Comptes Rendus, April 17) states that in certain cases a phenomenon of inductance comparable to that of electro-dynamics appears to be superposed on the ordinary phenomena of electrostatic influence.

If a charged conductor is caused to approach another conductor, or if the first conductor is charged or increased in potential, the second conductor becomes charged with electricity of the same kind, and with reverse motion the charge is of opposite kind. A conductor set in motion in the neighborhood of a second conductor tends to displace itself in the inverse sense of the communicated motion. Thus an oscillation of potential transmits itself to a distance very probably by inductance and not by influence.

Luminous Effects on Conducting Wires.—Borgman (Comptes Rendus, April 30) finds that a noninsulated metallic wire becomes covered with a luminous aureole when it is inserted in the circuit of an induction coil containing a spark gap or a vacuum tube. When the wire traverses a gradually exhausted tube, the luminous phenomena show a peculiar development. The aureole decreases in intensity, and is gradually replaced by a series of equidistant stars, around which luminous disks are formed with their planes at right angles to the wire. The number of stars and disks increases until the latter touch each other and fill the whole tube with a slightly stratified light. The approach of a magnet has the effect of inclining the plane of the rings. Tommasina (Comptes Rendus, May 28) notes that rhythmic crepitations may be heard along the "antenna" or radiating prolongation of one of the branches of a Hertzian primary. In the dark, mobile luminous *atgettes* may be seen around the radiating wire, and appear to vibrate synchronously, not with the sparks of the oscillator, but with the movements of the interrupter of the induction coil.

Photo-electricity.—Buisson (Comptes Rendus, May 14) finds that sunlight causes a diminution in rapidity of discharge from an amalgamated zinc plate, and that this effect is not permanent. The potential of a plate also varies under the action of sunlight, a large number of metals becoming more negative after illumination, while platinum becomes more positive. In general a plate has two definite potentials, one in darkness and one in light, and there is an inversion wave length, such that more refrangible waves cause a negative variation of potential, and less refrangible ones a positive variation. For zinc this wave length is 0.310 μ .

Electro-photography.—Nipher (Electrical Review, Aug. 10), after exposing a photographic plate to the light of an ordinary room for several days, places it on a glass plate covering a metal plate that is connected to one electrode of an influence machine. A coin is connected to the other electrode, and in four to ten minutes an electro-photograph of the coin is made. Development is carried out by a moderate light. Schaffers (Comptes Rendus, April 2) has shown that images may be produced on a sensitive plate by an induction coil, using two needles as poles. The positive needle touches the plate, while the negative is about half a millimetre off the plate, and a sheet of metal below facilitates the action. The image consists of small black lines directed from the positive to the negative pole, and appears to be due at first to the fusion of the silver bromide and of the medium, and after prolonged action to the reduction of the bromide.

Magnetic Field produced by Motion of an Electrified Body.—Crémieu (Comptes Rendus, June 5) has repeated Rowland's experiments that indicate that an electrified body in rapid motion produces a magnetic field in its neighborhood. He has examined the inductive action of a revolving charged disk upon a neighboring circuit, and

concludes that the motion of an electrified body does not appear to produce any magnetic effect in its vicinity.

Magnetism. *Theory.*—Lang (*Annalen der Physik*, July) interprets the so-called "amperean" molecular currents as convection currents produced by the revolution of negative electrons as satellites around the heavier positive electrons. The usual velocity is that of light, and if it becomes larger the satellites may change the electron around which they revolve.

Magnetization.—Maurain (*Comptes Rendus*, Aug. 13) finds that on electrolyzing a solution of ferrous sulphate in sodium pyrophosphate inside a magnetizing spiral adherent brilliant magnetized deposits of iron are obtained, the intensity of whose magnetization is constant for the different layers of the deposit, but is greater as the field in which it is obtained is stronger. The coercive force is enormous, and the reversal of the magnetization may be effected suddenly for a very small variation in the field.

Hysteresis.—Sheldon (*Electrical World and Engineer*, Feb. 10), to test the supposition that the retentivity and coercivity of magnetic substances (the two factors of hysteretic quality) might be dependent on the distance between their molecules, experimented with different arrangements of compass needles. When these were placed in line the magnetizing force required to break up the arrangement decreased as the distance between the pivots of the needles increased. The decrease does not become zero, however, but approaches a constant value. When the needles are arranged in multiple rows the polarity is more easily reversed owing to the influence of the rows on each other. As the distance between the rows is increased, the critical magnetizing force is increased, because the demagnetizing influence of the rows on each other is decreased.

Loss of Electric Charge.—Phillips (*Royal Society Proceedings*, 65, 1899) finds that under certain conditions an electrified body loses its charge in the neighborhood of a magnetic field. This only occurs at pressures below 0.2 millimetre of mercury.

Effect of Field on Fluids.—Jäger (*Vienna Academy Sitzungsberichte*, 108, 1899), in experiments on the behavior of fluids in the magnetic field, could not observe the least change in the capillarity constant of a liquid in a powerful field. Theory indicates, however, that when such liquid is a solution in a nonmagnetic solvent a change in vapor tension must occur, accompanied by a calculable potential difference. An attempt to confirm this experimentally was indecisive.

Effect on Elasticity.—Stevens and Dorsey (*Physical Review*, August, 1899), in experiments on the effect of magnetism on the elasticity of rods, find that the modulus of elasticity of wrought iron and steel increases with magnetization. In the case of steel little difference was observed for loads of 1 kilogramme and $\frac{1}{2}$ kilogramme, but in wrought iron the smaller load gave the greater displacement when equal magnetizing forces were used.

Diamagnetism.—Meyer (*Annalen der Physik*, April), noting the fact that in some diamagnetic compounds the molecular magnetism shows a greater diamagnetic value than would correspond to the sum of the atomic magnetisms, and that this is so in every case where the combination is accompanied by considerable expansion, has investigated increases with magnetization. In the case of contraction. Measurements made on copper salts show that expansion emphasizes the diamagnetic character of a substance, and contraction emphasizes its paramagnetic character. The magnetic properties of the elements can therefore only be

obtained from the elements themselves, or from compounds whose formation entails no change of volume.

Instruments.—Du Bois (*Zeitschrift für Instrumentenkraft*, April and May) describes a new form of his magnetic balance, for which he claims an accuracy five times that of the original type. The most important improvement lies in a compensation coil wound outside the main exciting coil, which neutralizes the stray field between the test rod and the outer windings.

Miscellany. *Range of Observable Phenomena.*—Stoney (*Dublin Royal Society*, 9, p. 79) classifies the various measurable distances as stellar distances, planetary intervals, laboratory measures, and molecular quantities. Each stands to the next in the ratio of 10^{10} to 1. Light, by its wonderful speed, brings within our grasp the enormous distance of the first group, and also brings us into touch with extremely minute intervals by the smallness of its wave lengths. A further subdivision is, to us, meaningless, and hence the known universe is comprised between the limits of ultra-stellar remoteness and infra-molecular proximity. Large as the range is, it might be infinitely larger in both directions, and it resembles an absorption band in a spectrum, representing the small portion of the material universe accessible to human faculties.

PHYSIOLOGY. **Respiration.**—In experiments by Dr. H. Wendelstadt, of Bonn, on the action of alcohol upon respiration, a small gasometer was closely applied to the mouth, while the subject was lying down, for ten minutes, and the quantity of air breathed was read off every ten seconds. The number of respirations was also counted in some of the later experiments. The temperature of the room was kept as nearly as possible at 65° F., and the experiments were conducted partly in the morning, when no fatigue had been undergone, and partly on subjects who were more or less exhausted after muscular or mental effort. Wine or pure alcohol mixed with sweetened lemonade was administered in moderate doses. In most cases much drowsiness or even heavy sleep was induced. The general results obtained in men who were not fatigued were that in one experiment there was no alteration in the volume of air respired, in 9 experiments there was a diminution, and in 54 cases there was an increase after the use of alcohol, but with much individual variation. In 29 cases in which pure alcohol was ingested, 7 showed diminution of respiratory activity, but when the alcohol was taken in the form of wine only 2 showed such diminution, while the amount of increase in every case where it occurred was greater. The difference, Dr. Wendelstadt thinks, is attributable to the presence of ethereal oils in the wine giving it its bouquet. It should be borne in mind that, although it has been found that the administration of 100 cubic centimetres of pure water does not augment the volume of respired air in a given time the same quantity of water with sugar and lime juice causes, at least in some instances, a slight increase. In persons who are exhausted by fatigue, the effects of alcohol in causing an increase in the volume of air breathed are much more marked. Since in febrile and debilitated states of the body the condition of the nervous system resembles that of a person exhausted by fatigue, Dr. Wendelstadt's experiments may be regarded as corroborating the conclusions arrived at by most clinical observers, that in such conditions alcohol is the best stimulant that can be given.

Dr. Leonard Hill, having subjected cats and dogs to conditions of atmospheric pressure similar to

those to which workers in deep bridge caissons are exposed, found that under rapid increase of pressure amounting to two atmospheres and rapid diminution to ordinary pressure no effects occurred beyond slight increase of the respiratory oscillations and slightly diminished frequency of the pulse. He therefore regards the mechanical congestion theory of caisson disease as untenable. But how, the *Lancet* asks, does he explain the hæmorrhages from nose and ears that have been observed when the pressure is too suddenly released?

Experiments on the temperature of the animal body during fasting and the rate of assimilation of carbohydrates conducted at the University of Genoa and described by Prof. Ugolino Mosso are particularly interesting in that they establish the efficacy of sugar in raising the temperature of an animal when it has fallen during a period of fasting. From one to four grammes of sugar per kilogramme were found to cause a rapid rise of temperature in the first ten or fifteen minutes; in from one to two hours the temperature reached a maximum, and remained constant or elevated for an interval of time varying with the amount of sugar introduced. The effect of sugar is most marked after a long fast, when the temperature is lowest. The action of bread is in some respects opposite in character. The temperature rises more slowly after the introduction of bread than after sugar, and the rise in this case is most rapid for animals whose period of starvation has been short, and whose temperature is not too low.

Circulation.—In continuation of his researches on the physiology of the mammalian heart, J. A. McWilliam has studied the influence of chloroform on the rate of heart beat, with observations on the effects of asphyxia. The general effect of chloroform upon the pulse of the cat appeared to be the same as in man—first, a stage of acceleration, and then one of moderate or slow rate. It was found that: 1. During relatively light anaesthesia there might be (a) a brief phase of slowing, followed usually by acceleration, or (b) acceleration without primary slowing; and convulsive movements were marked. 2. With deeper anaesthesia acceleration was the rule, associated with respiratory effort and diffuse motor excitation. 3. In still deeper anaesthesia there might be no change in pulse rate for a time, and the slowing convulsive movement was absent or slight and late in development. The acceleration was essentially due to diminished activity of the vagus center, and was marked only when contraction of skeletal muscles was excited. Slowing depended mainly on increased activity of the same center, but in the final phase there was direct influence on the heart itself.

The results of systematic observations on the conditions of students participating in athletic games have been published by Prof. Alfred Stengel, M. D., of the University of Pennsylvania, and an account of similar studies with students of the University of Cambridge is given by Prof. Clifford Allbutt in the fifth volume of his *System of Medicine*. Important agreements and a few differences appear in the conclusions reached by these authors. By percussion and auscultation Prof. Stengel was able with a brush dipped in oil to map out on the surface of the chest the borders of the heart, the mid-sternal line, the episternal notch, and the outlines of the upper ribs. The lines thus obtained were transferred to tracing paper applied to the chest, and were thence reproduced on drawing paper. In watching the effects of training attention was first drawn to the ease and frequency with which a soft systolic murmur was found to develop over the heart. In a special

trial of 9 football players in the summer, the prompt development of a very evident cardiac murmur after a little exertion was noticed. But during the succeeding autumn term the same men, tested under similar conditions, gave no evidence of cardiac murmurs. In one young man an extension of the cardiac limits was observed after a half-mile race. The left border of the heart was displaced to a point somewhat beyond the nipple line, and the right border to a distance of about two thirds of an inch beyond the corresponding edge of the sternum. After the race a diffused thrill was felt over the apex of the heart and in the epigastrium, which was confirmed by auscultation, and the second pulmonary sound was distinctly heard. In the case of a half-mile runner, twenty-two years of age, in whom the heart sounds before the race were normal, a distinct systolic thrill at the apex of the heart was perceived at the conclusion of the race. A trained walker, twenty-three years of age, in regular "form" for three years, showed an increase of the first sound of the heart, together with a puffing systolic murmur after the race. The right border of the heart underwent no displacement in this case, but the left border was displaced to the nipple line after exercise. The author is of the opinion that a preliminary overdistention of the right side of the heart occurs after exercise, and is attended with a certain amount of discomfort or distress; but this eventually subsides when the athlete is said to have recovered his "second wind." This conclusion, reached independently by him, is substantially the same as that arrived at by Dr. Allbutt. Dr. Stengel finds, further, that the pulmonary arterial murmurs (heard in the second intercostal space) are due to a dilatation of the artery prior to its bifurcation, and are almost habitually present in young boys after exertion. A distinct pulsation is likewise often felt in this situation. The cardiac systolic murmurs are, as a rule, due to mitral regurgitation, but others are possibly of cardio-pulmonary origin. Certain remote after-effects are also mentioned as appearing in middle-aged persons who have indulged freely in athletics during youth. The author concludes that overdistention of the heart is frequent as a result of athletic contests, and may cause harm if the person is in ill health or badly trained, and that permanent hypertrophy with symptoms of palpitation or distress are results not seldom met with.

Having determined the percentage oxygen capacity (between 16 and 21 in healthy men) and the total oxygen capacity, J. S. Haldane and J. Lorraine Smith computed the total volume of the blood by calculation from the total and the percentage oxygen capacities, and the total mass by multiplying the volume by the specific gravity (about 1.055). The results of a number of experiments on healthy persons showed that the commonly accepted estimate of the mass of blood as one twelfth of the weight of the body is much too high, the average found being only about $\frac{1}{10}$ of the weight without clothes. As a general rule, the mass of the blood (in proportion to body weight) was found to be greater as the percentage oxygen capacity was less, so that the total oxygen capacity (or the total amount of hæmoglobin) is relatively constant. Applying their method to special affections, the authors found that in chlorosis the total oxygen capacity was maintained at approximately the normal amount, while the percentage oxygen capacity diminished (for example, below 50 per cent.), and the volume of the blood was increased to a marked degree. The decrease in the number of red corpuscles and the amount of hæmoglobin could not be regarded as due simply to

increase in the plasma. In pernicious anæmia the total oxygen capacity was diminished in a marked degree as compared with the normal, as also was the percentage oxygen capacity. The volume of the blood was markedly increased. The decrease in the number of red corpuscles and in the amount of hæmoglobin was greater than could be explained by the increase in the volume of the blood.

In his Hunterian lecture on The Effects of Influenza upon the Heart and Circulation, Dr. Sansom noticed as the chief disturbances observed the rapid heart, cardiac dilatation, the irregular heart, the slow heart, and pain in the heart, all following or dependent upon the influenzal infection. In connection with the rapid heart other phenomena were observed, such as those associated with Graves's disease and flatulent dyspepsia, accompanied in some cases with dyspnoea and a sense of failing heart. These disturbances were termed by the author "vagus storms." They seem to involve all the tracts supplied by the pneumogastric nerve, but in some cases one area disproportionately to the others.

It was found by Dr. F. W. Mott and Dr. W. D. Halliburton in experiments on anæsthetized animals that the cerebro-spinal fluid, removed sometimes after death and sometimes by lumbar puncture during life from cases of brain atrophy, and especially from patients suffering from general paralysis of the insane, caused when injected into the vessels a fall of arterial pressure with but a trifling effect upon the respiration. Chemical examination of the fluid showed that it contained nucleo-proteid and choline, and further experiments demonstrated that the effect on the circulation was due to the choline. The authors found every reason to believe that choline proceeds, like the nucleo-proteid, from the acute disintegration of the brain tissue, and they think that some, but not all, of the symptoms of general paralysis are due to auto-intoxication, nucleo-proteid and choline contained in the cerebro-spinal fluid being absorbed into the blood. In accordance with this the authors have found choline in the blood of general paralytic patients drawn by venesection. When from 1 to 10 cubic centimetres of solutions of choline containing 2 parts in 1,000 were injected into the vessels, a temporary fall of blood pressure occurred, due partly to the action on the heart, but chiefly to dilatation of the peripheral vessels of the intestinal area. Choline has little or no action on the nerve trunks, as tested by their electrical response to stimulation. It was found that intravenous injection of stated proportions of neurine solution caused a fall of arterial pressure followed by a marked rise and a subsequent fall to the normal level. The typical effects of neurine are still obvious after the removal of the influence of the central nervous system by section of the spinal cord or of the splanchnics. But after the action of the peripheral ganglia has been cut off by the influence of nicotine, neurine produces only a fall of blood pressure. It hence appears that the constriction of the vessels is due to the action of the drug on the ganglia. Section of the vagi had no influence on the results of injecting either choline or neurine, and there was no evidence that either base acted directly on the cerebral vessels. Unlike choline, neurine is intensely toxic to nerve trunks. The authors confirm the statement of Corvello, that neurine acts like curare on the nerve endings of voluntary muscle, and that the cessation of respiration is due to this action.

The ferrocyanide method of determining the oxygen capacity of the hæmoglobin of the blood described by John Haldane depends on the fact that combined oxygen is liberated rapidly and

completely on addition of solution of potassium ferrocyanide to laked blood, and may be easily measured. The author affirms that when the fallacies due to incomplete laking of the blood and to the presence of bacteria are eliminated, the method gives exact results.

Mr. W. H. Thompson, having studied the effects of the intravascular injection of peptone and albumose, has shown that the vessels of the kidney and limbs are but slightly affected, while those of the spleen undergo moderate, and those of the liver considerable, stimulation coincidently with the fall of blood pressure.

Digestion.—The problem of the process by which the materials ingested into the stomach and intestinal canal are absorbed, concerning which various explanations have been offered, is the subject of a memoir in the Philosophical Transactions by Prof. E. Waymouth Reid. The experiments were performed on anæsthetized dogs. Two loops of intestine of equal length were withdrawn from the abdomen and covered during the whole duration of the experiment with cloths wrung out of warm water. The materials injected were solutions of serum, peptone, and sugar at the temperature of the body. The main results of the author's inquiry are stated in the propositions that a physiological activity of the intestinal epithelium is demonstrated, first, by the adsorption capable of being effected by the animal of its own serum or even plasma under conditions in which filtration into blood capillaries or lacteals, osmosis, or absorption, are excluded; and, second, by the cessation or diminution of the adsorption of serum when the epithelium is removed, in spite of the fact that removal must at any rate increase the facilities for osmosis and infiltration. The word "adsorption" is used by Prof. Reid in the sense of "a simple soakage with some degree of assimilation, a sort of dyeing of the gut membrane" with the solutions. The state of nutrition of the cells is regarded as the main factor in their activity, and this is intimately associated with the blood supply. The activity of the cells was characterized by a slower uptake of the organic acids of the serum, and a rather quicker uptake of the salts, than of the water. No evidence of the existence of specific absorptive fibers in the mesenteric nerves was obtained. The bile did not have a stimulant action on the cells. Weak alcohol acted as a stimulant without any concomitant increase of blood supply being shown. Distilled water was found in the course of the experiments to act very deleteriously upon protoplasm, a simple washing out with it causing detachment of the epithelial cells. It appeared in experiments made with those substances that the chief factor in the absorption of peptone was an assimilation (or "adsorption") by the cells, and in the absorption of glucose, diffusion variable according to the permeability of the cells.

From a research upon the digestibility of some nonnitrogenous constituents of certain feeding stuffs, G. S. Fraps finds that sugars occur in all feeding stuffs; that they are completely digested as a rule; and that their determination is of especial importance in the case of hays and cottonseed meal: that the average digestibility of pentosans in 34 samples is 64.2, and the average for timothy hay (8 samples) is 53.9. The constituents of the nitrogen-free extract may be arranged in the following order, according to their digestibility: (1) sugars; (2) starch; (3) pentosans (bodies which on hydrolysis yield pentose sugars); (4) residue. The pseudopentosans of crude fiber are less digestible than the residue.

The residue is sometimes more, sometimes less digested than the nitrogen-free extract. Crude fiber may be changed during digestion so as to appear as nitrogen-free extract in the excrement. The determination of sugar, starch, and pentosan is more important than that of crude fiber.

The observations of V. Harley indicate that the digestive power of pepsin is not affected by dry heat—that is, by three hours' exposure, at 100° C., over sulphuric acid. The action of heat on pepsin in solution is very different, however, a temperature of 82° C. in the experiment described causing its destruction. At temperatures below 75° C. the disaggregation of fibrin was complete in twenty-four hours, but at 81.5° C. the fragments of fibrine were only softened superficially; and at 82° C. the pepsin had no effect whatever, even after twenty-four hours.

In 1898 (see *Annual Cyclopædia* for 1898) Dr. Carl Schlatter, of Zurich, reported a case of complete extirpation of the stomach, and proved from the physiological condition of the patient several months afterward that only the slightest effects on the function of digestion had followed the operation. He has more recently described a case of resection of about six feet of the small intestine without the patient suffering serious injury. The patient was an Italian who had been stabbed in a brawl, and was found, upon examination about nine hours afterward, to have a protrusion of the bowel, the exposed part of which was already dying. The affected part was cut out, and the ends of the other parts were sutured together. The patient rallied fast, and steadily improved in health and weight, so that he left the hospital in good condition. The chemical examination of his diet and excretions showed that the percentage of absorption of nitrogen was fully up to the normal, but that there was a greater loss of the fat in the food than should have occurred in health. His subsequent history, however, was not quite so favorable. Eight months after the operation his weight had decreased, and he was not able to tolerate the solid food to which he had previously been accustomed. Yet, while he felt unequal to much work, he was regarded as on the whole in a very fair condition.

In his Hunterian lectures on the Surgery of the Stomach, Prof. Mayo Robson has more fully shown that large portions of the stomach may be excised, or even the whole removed, with no very great mortality, and in successful cases with little effect upon the patient's digestion. In the present opinion of the medical profession the stomach hardly occupies so important a position in digestion as it formerly held. It is now regarded as rather a preparer for the exercise of the digestive powers of the pancreas than as itself an active digestive agent. One of its functions is to render innocuous many of the micro-organisms which enter with the food.

The relation of the cell to the enzymes or soluble ferments which originate from cells was touched upon by J. Burdon Sanderson in the address he delivered before the International Medical Congress at Paris. Formerly, the speaker pointed out, each kind of cell was regarded as having a single special function proper to itself, but the progress of investigation has shown that each species of cell possesses a great variety of functions, and that it may act upon the medium which it inhabits and be acted upon by it in a variety of ways. Thus, for example, the colorless corpuscles of the blood (or, as they are now called, leucocytes) are considered not merely as agents in the process of suppuration or as typical

examples of contractile protoplasm, but rather as living structures possessing chemical functions indispensable to the life of the organism. Similarly, the blood disk, which formerly was thought of merely as a carrier of hæmoglobin, is now regarded as a living cell possessed of chemical susceptibilities which render it the most delicate reagent that can be employed for the detection of abnormal conditions in the blood. The tendency of recent research is to show that the reactions referred to as chemical functions of the cell (action of the cell on its environment—actions of the environment on the cell) are the work of ferments, which are products of the evolution of the living cell, and therefore to which the term enzymes may be applied. Recent researches have plainly indicated that in the case of the disease-producing micro-organisms the specific functions which for years were regarded as proper to, and inseparable from, the cell, belong essentially to the enzymes which they contain. It has been further shown that similar statements can be made as regards ferment processes which differ widely from each other, and no less widely from those induced by bacteria. So that in the domain of microbiology the enzyme may in a certain sense be said to have "dethroned the cell."

In the first part of his *Microscopic Researches* on Glycogen, published in 1896, Dr. Charles Creighton gave the details of his observations on the character and functions of glycogen in the embryos of mammals, and showed how he had been led to regard it as the precursor, the temporary substitute, or the accessory of red blood. In the second part of the memoir, published in 1899, he has described the distribution of glycogen in the invertebrates, the mode in which and the period when it is deposited in various examples, and has developed the view which he has been led to adopt. The solid carbohydrate starch or its modification is regarded as the blood of vegetables, and in the author's opinion glycogen or animal starch is co-ordinate in value with the blood or lymph of animals. He finds it not unreasonable to look upon starch as a fixed instead of a fluid nutriment. A substance resembling starch in composition but differing from it in giving a red reaction with iodine, has long been known, and evidence is adduced from the observations of chemists and biologists showing how much attention has been given to the subject, and how wide is the distribution of animal starch. It has been found in protozoa, less distinctly in cœlenterata and worms, very clearly in the chief families of mollusks, and in arthropods. In the higher mollusks, which have been the special object of the author's investigations, it is accumulated around the vessels and is contained in the large plasma cells, around those of the nerve centers and of the digestive and nerve tracts, or exactly in those parts which are nearest to the sources of supply and those in which the most active processes are taking place. In the arthropods it is also found in the organs of reproduction, as well as elsewhere, at certain stages of development. The plasma cells in the mollusks mentioned here, with their contained zoamyline, occupy the position of the vascular sheaths of the vertebrates; and as the tissues in the vertebrates derive their pabulum from the lymph which circulates in the perivascular sheath, so the tissues of the mollusca draw their nourishment from the carbohydrate stored up in the plasma cells. In the vertebrates the original vascular system of the molluscan series no longer contains a lymphlike fluid, but is filled with red blood.

M. Bouchard reports to the French Academy of

Sciences having found that an animal gorged with fat and then deprived of food may still gain in weight, the increase resulting from the oxidation of the fat, which is transformed into glycogen and accumulates in the muscles instead of in the liver.

J. Skegen has found reason from results of experiments with liver extract to believe that the proteids undergo a disintegration in the liver which leads to the detachment of a molecule of a sugarlike substance containing nitrogen, and this by the action of a liver ferment undergoes further changes terminating in the production of glycogen. Similar conclusions have been arrived at by Dr. Bernhard Schoendorff, while M. C. Bouchard and M. A. Desgrez have satisfied themselves that muscle glycogen can be formed in the body from incompletely oxidized fats. The experiments of R. Cohn render it probable that glycogen can be derived from leucine, and Dr. Martin Jacoby has pointed out that there are probably many ferments in the liver.

Secretion.—Physiologists have not been agreed as to whether a connection exists between the lymphatic and the blood vascular systems. A number, including Mascagni, Haller, and Cruikshank, have denied the existence of such connection except with the large veins in the neck, while a considerable number of others have observed cases in which the lymphatics directly opened into the venæ cavæ, the portal, renal, axillary, and internal iliac veins. Mr. Cecil H. Leaf has now recorded in the *Lancet* other examples of connection between the lymphatic and venous trunks, and has further shown that a direct communication exists between the small arteries in the thorax and the lymphatic vessels in that region, although the connection is not so free as between the lymphatics and the veins. It has been known for some time, he says, that the lymph often assumes a pink or reddish hue, and the color has been shown to be due to the presence of red blood corpuscles. "How do the corpuscles pass into the lymphatic vessels? If the fact already mentioned is admitted—viz., that a certain number of small arteries pour their contents directly into lymphatic vessels—the presence of these corpuscles is readily explained, and another factor is present which would materially quicken the movements of the lymph. However, it is only right to add that the arteries apparently do not communicate directly with the lymphatics nearly so frequently as do the veins. If the communications between the veins and lymphatics can be shown beyond a doubt to take place all over the body—and already they have been observed to exist to a very considerable extent—it follows that we ought to regard the venous system as a part, and that no inconsiderable part, of the absorbent system.

On examining the extract of the adrenal capsules Mr. John Abel found that by the employment of benzoyl chloride and a 10-per-cent. solution of soda he was able to extract a peculiar substance which is present in the proportion of about 1 part in 10,000 parts of the gland substance, to which he gave the name of epinephrin. This substance is a base which has a bitterish taste and produces a slight local anæsthesia. Its formula is $C_{11}H_{13}NO_2$. It is precipitated from its acid solutions by picric acid. The author found that when solutions of the salts of epinephrin are applied to the normal conjunctiva or to one which by stimulation is more or less congested, the vessels immediately contract and the contraction persists for a long time. The same holds good for other mucous membranes. It should be observed, however, that this is true only of the salts of epinephrin, and that the base itself has very slight, if any, physi-

ological properties. The salts when injected into the veins cause great and persistent increase of blood pressure. They first excite and then paralyze the respiratory centers. At a later period, and when the substance is given in larger doses, the heart is paralyzed. Evidence has now been obtained that the blood returning from the adrenals also contains the substance that raises the blood pressure, and that this is not present in the blood of any other part of the body. Its formation appears to be under the influence of the splanchnic nerves, which may thus be regarded as containing secretory as well as vaso-dilator fibers. Electric stimulation of the splanchnic nerves occasions an increase in the production of epinephrin. The author further considers the relations of epinephrin to Addison's disease.

A contribution to the discussion of the theory of Horbaczewski, that uric acid is derived from the disintegration of proteids containing nuclein, notably of the leucocytes, is made by Dr. Carstairs C. Douglas, of Glasgow, from the results of 95 simultaneous quantitative determinations made upon 7 persons in good health and 35 persons suffering from various diseases. The author concludes that on the whole there is a discrepancy between the amount of uric acid thrown off from the body and the number of leucocytes, and his observations do not support the view that normally the source of uric acid is found in the nuclein of the leucocytes. His analyses showed, among other things, that uric acid varies much less with diet than does urea.

The results of an investigation described by Francis W. Goodbody go to show that sodium salicylate causes an increase in the quantity of urine excreted and in its specific gravity. The latter increase is ascribed principally to the augmented elimination of the nitrogenous substances, especially of the urea. It was further observed that sodium salicylate causes an increased breaking up of proteids in the body, and that it has no influence on general metabolism so far as absorption of the proteids and fats is concerned, notwithstanding its known cholagogue action.

Assuming that in plants and the lower animals the simple inorganic compounds of phosphorus are used in the synthesis of the nucleins, and an investigation by one of the authors having shown that a similar synthesis is effected in fishes, Noel Paton, J. C. Dunlop, and R. S. Atchison have undertaken an investigation of the progress of such synthesis in mammalia—of which little is known. As a preliminary to the study of the metabolism of phosphorus a knowledge of its channels of absorption and secretion was required. Carrying on their studies upon the dog and the goat, the authors found that in the normal condition, with the animal in phosphorus equilibrium, the absorption and excretion of phosphorus by the intestines were equal. During lactation in the goat the excretion of phosphorus by the bowel was diminished to meet the demands of milk formation; while in the dog during lactation a diminished excretion of phosphorus in the urine was remarked. The milk of the goat contained a very high proportion of phosphorus, while the percentage of organically combined phosphorus was lower than in the milk of the human subject or of the cow. The administration of the soluble glycerophosphate of lime by the mouth causes no increased excretion of phosphorus in the urine of the dog and in the urine and milk of the goat.

The general conclusion from a discussion in the British Medical Association of the origin of uric acid, in which Prof. W. D. Halliburton,

Prof. D. Milroy, Dr. Alexander King, and others participated, appears to have been that it is double, a part of the acid being the result of the disintegration of the nuclein taken in with the food, and another part proceeding from destructive changes of the nuclein contained in the body; or, as Prof. Halliburton expressed it, part of exogenous and part of endogenous origin. The latter portion is derived from the metabolism of the leucocytes that are so abundantly formed after the ingestion of food.

The research of Prof. A. Herzen, of Lausanne, into the function of the spleen is reviewed in the *Lancet* by Henry T. Bellamy, who finds that from the bulk of the evidence collected by M. Herzen there is little room for doubt that, apart from the hæmatopolitic and possibly allied functions possessed by the organ, it furnishes a product of "internal secretion" which causes in the pancreas the transformation of its inert zymogen into active trypsin.

After a long series of experiments and observations, E. O. Hultgren and O. A. Anderson report that extirpation of the suprarenal capsules in cats, dogs, and rabbits occasioned death within a week or ten days. Removal of an organ on one side was followed by the animal becoming thin for a short period. Retention of a small fragment was found sufficient to preserve life, but when both organs were removed death supervened, with great fall of temperature. The metabolism of albumin, the quantity of hæmoglobin, and the number of the red corpuscles were not affected. Injections of small quantities of adrenal extract caused temporary improvement, but when large quantities were injected death occurred in the rabbit from œdema of the lungs. Injections of extracts of adrenals of rabbits, guinea pigs, cats, rams, and steers caused rise of temperature in rabbits, while injection of adrenals of sheep, oxen, and pigs usually caused fall in temperature.

Muscular System.—The physiological effects of creatin, a normal constituent of flesh, and one of the principal constituents of most meat extracts, and of creatinin, its anhydride, a normal constituent of human urine, and the value of those substances as nutrients have been investigated with much pains by Prof. J. W. Mallet. From his experiments the author draws as his main conclusion that by far the larger part of the flesh bases ingested, if not absolutely the whole, does not undergo metabolism with the production of urea or anything else, but, on the contrary, is eliminated by the kidneys. In the case of creatinin it is excreted unchanged, while creatin is changed wholly or very largely into creatinin. The fact of the quantitative recovery of creatin and creatinin from the urine evidently accords fully with the generally accepted belief that these substances can not serve to build up proteids, and are therefore not to be classed among tissue-forming food materials. On the whole, the investigation is unfavorable to the idea of the creatin of living muscle being the antecedent of urea in nitrogenous metabolism. Admitting that it is still an unsolved problem what nitrogenous substance or substances may properly be regarded as intermediate between muscle proteids and urea, it may fairly be considered established for nutrition investigations that the so-called flesh bases creatin and creatinin occurring in food may be entirely disregarded as sources of energy. In the discussion of the results of analyses of meat and forms of food prepared from it, such as soups and the like, it is evidently wrong and misleading to confound together, under the

head of protein or proteid materials, the proteids proper, capable of building up the nitrogenous tissues of the living body, and of furnishing muscular heat and energy by oxidation, and these so-called flesh bases, which, taken in along with food, are not available for either of these important purposes. Even if viewed in the light of nerve stimulants only, and thus to be classed with tea and coffee as adjuncts to food rather than as true food itself, meat extracts, so far as the flesh bases creatin and creatinin are concerned, are shown by the investigation to be very much less active as to their effects upon the nervous system than they have been commonly reported.

Experiments made by Prof. Angelo Mosso with his ergograph indicate that in soldiers after forced marches the power of the muscles of the arm and the hand is diminished; so that, as Ioteyko has observed, while moderate exercise of the psycho-motor centers produces increased activity of both sensory and dynamogenic centers, exhaustion of one center, such as that affecting movements of the lower limbs, causes depression of all centers, and has a tendency to become generalized. Prof. Mosso suggests that fatigue is due to some toxin entering the blood current.

Dr. William Ewart, in a lecture on Some of the Mechanism of the Heart and its Valves, dwelt upon the presence of a supra-papillary and a retro-mitral space in the ventricle. He showed that during contraction the posterior or mitral flap is thrown into pleats, admitted a powerful ventricular aspiration, and declared his agreement with those who accept a muscular and a valvular element in the first sound.

Investigations by Dr. J. L. Bunch on the innervation of the muscular coat and the vessels of the intestine go to show that these parts are supplied by the splanchnic nerves, which contain both constrictor and dilator fibers derived primarily from the spinal cord, and that in dogs they leave the spinal cord by the anterior roots of the post-cervical nerves from the second to the sixteenth, the higher roots containing a larger percentage of dilator fibers, the lower roots of constrictor fibers.

In his Croonian lecture on Degeneration of the Neuron, Dr. Frederick Nott expressed himself in favor of the view that the terminal arborization of the axis-cylinder process of one neuron does not anatomically fuse with the cell body and dendrons of another, and that trophically and genetically the two are independent; yet that there is a physiological connection between adjacent neurons. He also pointed out that the integrity of the sensory moiety of a reflex is almost as important as that of the motor segment—in other words, that sensation must be acute and perfect if the corresponding muscular movements are to retain their delicacy and precision.

Nervous System.—In a Lees and Raper Memorial lecture, at St. James's Hall, London, on the Effect of Alcohol on the Human Brain, Victor Horsley limited himself to the effects of small doses of the drug. He began by saying that all drugs had what is called a selective action, inasmuch as they act by virtue of a chemical affinity with the different parts of the structure, producing different effects in so far as these same parts differed. In regard to the effect of small quantities of alcohol on the central nervous system it was necessary to consider the results of the drug on the higher psychical functions of the brain—that is, on ideation or the intellectual thinking apparatus. The effect on the centers in the brain for voluntary action and the effect on the cerebellar membrane for

co-ordination and automatic equilibration had further to be dealt with. To find whether a brain worked as well after a small quantity of alcohol was taken as it did before, some means of exactly comparing the condition of the activity of the brain under these different circumstances was necessary. The easiest way to do this was to measure what was called the "reaction time," or the very small fraction of a second which was consumed by the nervous system while it received an impression and executed some movement in response to it. Kraepelin, who had made the most accurate investigations of this subject, had found that the simple reaction period was slightly quickened after the ingestion of a small amount of alcohol, but that very speedily a slowing began, and became more marked, and endured as long as the alcohol was in active operation in the body; so that the time spent by the complex reaction—or a reaction in which there was an association of ideas—was never quickened by the alcohol. On the whole a very distinct and depressing effect on the highest centers of the brain was produced. With reference to the effect of alcohol on voluntary movement it should be remembered that the energy producing a single contraction of a muscle was manifested in an intermittent manner; it was not one impulse, but a succession of impulses. Under the influence of alcohol the normal summation of these impulses was interfered with, and what was known as a tremor was produced. The results of Kraepelin's dynamometer measurements of the effect of small doses of alcohol on the voluntary centers showed, as in the former case, that an apparently additional amount of work was put out at first, but the acceleration or stimulation was quickly followed by the lowering or depressing effect. The effect of a dose of tea was spoken of as in marked contrast with this. No lowering effect is seen when tea is taken beyond the one due to normal fatigue common to all experiments. The apparent acceleration induced at first by alcohol has not been explained, but it may result from a loss of control. It "was not to be regarded as a real thing, but as an evidence of the paralyzing and deleterious effect of alcohol." The next subject for consideration was the influence of the drug on the cerebellum. A close association has been found to exist between the muscles of the lower limbs and this organ, and one of the further effects of alcohol in slightly larger doses than those which had been under consideration was to destroy the special function of the cerebellum and produce a sensation of tremor and weakness in the legs, causing the victim to stagger and find standing difficult. While it is extremely difficult to demonstrate scientifically the immediate chemical effect of alcohol on the nerve cells, it has been ascertained that under its prolonged use the granular masses in the Purkinje cells disappear, the protoplasm of the body of the corpuscle loses its distinctive structure, and the nucleus is very greatly altered and distorted in shape. Under the toxic influence of tonic alcoholism the dendrites of the pyramidal cells exhibit swellings and shrinkages. A remarkable constant feature of degeneration in the alcoholic person's brain is widespread pigmentation in the nerve cells—an exaggeration of a normal fact, accompanied by shrinkage of the protoplasm of the cell. The author gave as his conclusion that from a scientific point of view the contention so often put forward that small doses of alcohol, such as people take at meals, have practically no pernicious effect could not be maintained.

It is an established fact that the extinct mam-

malia of the middle and lower Tertiaries had, as compared with their nearest living congeners, an extremely small cerebrum. The same is the case in comparing anthropoid apes and man. The significance of the difference has been studied by Prof. E. Ray Lankester, who regards the fact as associated with the development of the faculty of educability. The earlier animals were possessed of the instincts and the faculties of performing certain acts appertaining to their species, but were incapable, or nearly so, of individual development. The growth of this faculty—which the author calls educability—is associated with increase in the size of the cerebrum. "A mere spoonful of cerebral tissue is sufficient to carry abundant and highly efficient *instinctive* mechanism from generation to generation, but for the more valuable capacity of elaborating *new* brain mechanism in the individual as the result of the individual's experience of surrounding conditions a very much larger volume of cerebral tissue is needed." Prof. Lankester applies this view to biological development and evolution, and to the question of the inheritance of acquired faculties.

In an evening lecture, delivered at the meeting of the British Association, Prof. F. Gotch said that animal electricity, if strictly interpreted, had a most extensive scope commensurate with all forms of animal life. This large scope gave the study of electro-physiology all its importance, an importance accentuated by the belief that electrical disturbance was the safest index as to the state of the living molecular poise, the poise which obscured, if it did not constitute, the mystery of life. The study had, however, a special significance in connection with one class of living structures, namely, those which constitute the nervous system. There was no doubt that organs of an essentially nervous type exist, the prime object of whose activity is the production of electrical disturbance. Of these the author considered especially the electric organs of certain fishes, concerning which he discussed four successive questions: First, what are the peculiar structural features which all electrical fish show, and how far these account for their extraordinary powers; second, what are the characters of the electrical shocks which these fish are able to give; third, what are the characters of the relatively insignificant electrical effects produced in a nerve when traversed by a nervous impulse; and, fourth, whether the two classes of electrical effects, those of the electrical fish and those of all nerves, could be regarded as fundamentally the same phenomena, in spite of their apparent dissimilarity. After describing the electric organs of fishes and their power, the speaker said that the nerve electrical effect was very similar to that present in each disk of the electrical organ. He then brought forward evidence to show that there must be an electrical disturbance in the nerve endings of an organ whenever a nervous impulse might be produced outside the nerves. The astounding effects produced by the electrical organs of fishes thus have their physiological counterparts in the nerves, and in this as in other departments of natural science Nature shows no gulf.

Studies of the centripetal and centrifugal medullated nerve fibers arising in the spinal ganglia of the mammal were made by H. H. Dale for the two purposes of determining the relative number of medullated fibers centrally and proximally of the spinal ganglion and of finding the relative number of the fibers of any given size in the same situations. An exact knowledge of these points would go far toward deciding whether any fibers end free in the spinal ganglion; whether either of the cell processes divides in the ganglion or soon

after its exit from the same; and whether the central and peripheral processes of any or all of the spinal ganglion cells are unequal in diameter. The author's conclusion is that in the cat there are constantly a few more medullated fibers in a nerve immediately distal to the spinal ganglion than in the nerve immediately proximal to the ganglion; that is, that there are a few more medullated fibers in the trunk than in the nerve roots. The excess is on an average about 0.5 per cent. of the total number of nerve fibers. The excess of nerve fibers in the trunk is apparently caused by fibers not more than $6\ \mu$ in diameter. These fibers are in all probability medullated fibers which pass to the trunk by way of the gray ramus communicans, and end in connection with the vessels or other tissue of the ganglion. Allowing for those fibers, the author finds that the number of fibers close up to the ganglion is the same as the number several millimetres from it both proximally and distally—that is, none of the medullated fibers given off by the ganglion cells end in the nerve or roots close to the ganglion. There are more fibers of $6\ \mu$ and upward in the anterior root close to the spinal cord than in the anterior root close to the ganglion—or, in other words, the fibers taper slightly. A similar difference appears between the size of the nerve fibers in the roots and that of those in the trunk. Probably, then, the posterior root fibers also taper slightly. The tapering of the motor fibers makes it impossible to draw conclusions as to the relative size of the central and peripheral processes of the spinal ganglion cells, but the evidence is against the view that the central processes are in general conspicuously smaller.

The objects of certain experiments described by J. N. Langley were to ascertain the extent of the pilomotor reflexes which are obtained on stimulating different portions of the sympathetic chain, to determine the mechanism by which the reflexes are produced, and to point out certain deductions which are to be drawn from the facts as to the arrangement of the preganglionic nerve fibers. It was shown that each efferent nerve fiber (preganglionic nerve fiber passing from the spinal cord to the sympathetic) divides into branches and supplies several, probably many, nerve cells. The nerve fibers which run to compound ganglia, as the superior cervical ganglion, the ganglion stellatum, and the coeliac ganglion, may send all their branches to one ganglion. The fibers which run to single symmetrical ganglia send their branches to more than one ganglion. In the lower thoracic, the lumbar, and the sacral regions of the sympathetic in the cat the great majority of the fibers send branches to three ganglia; a few send branches to four. In the corresponding regions of the dog the single nerve fibers appear commonly to send to four ganglia, and probably to more. In the upper cervical region many of the preganglionic fibers run to five or six ganglia in addition to the compound ganglion of the stellatum. The ganglia to which a single nerve fiber gives branches are ordinarily consecutive. But if a ganglion contains no nerve cells of a given class, the fibers of this class will ordinarily pass over the ganglion without making connection with it, and send their branches to the next ganglion peripherally which does contain nerve cells of the given class. Stimulation of a preganglionic fiber at any part of its course sets up a nervous impulse which travels to all the branches of the fiber and stimulates the nerve cells with which the branches are connected. This stimulation peripherally of a fiber of one or more branches will excite nerve cells centrally in one or more ganglia of the point

stimulated, and will produce a preganglionic axon reflex. The author thinks that these results support the view he had previously put forward that no reflexes save axon reflexes occur from the ganglion of the sympathetic system.

In a study by the same author of the regeneration of the preganglionic fibers of the sympathetic system, the superior cervical ganglion in a cat was excised, leaving a gap in the nervous tissue of less than a centimetre. The cervical sympathetic nerve did not recover its function for a year and eleven months. The result was regarded as establishing a possibility that the preganglionic fibers are unable to form direct functional connections with the peripheral tissues. Direct stimulation of the sclerotic, on the side on which the ganglion had been excised, did not give local dilatation of the pupil. This had already been observed. The fact affords evidence that all the fibers for the radical contractile substance (dilator muscle) of the pupil pass through the superior cervical ganglion and have no nerve cells on their course beyond this ganglion. Although the cervical sympathetic did not recover its function, the nerve strands beyond the place of section contained numerous normal nerve fibers. After section of the lumbar sympathetic trunk, no return of function was found for thirty days, a very slight return was found in thirty-five days, and a considerable though not complete return in forty-eight days. Broadly speaking, the pilomotor fibers in regenerating establish functional connection, first with the nearest ganglion, then with the next, and so on downward. The new connections of the various classes of nerve fibers in the several spinal nerves are not made indiscriminately with the several ganglia and with the different classes of nerve cells in them. A marked tendency is observed for the normal complex relations to be re-established. But some abnormal connections are made. On the view that nerve fibers grow out from their nerve cells, it appears probable that one factor in bringing about a re-establishment of normal connection is a tendency of the several cut fibers to grow to a certain definite length—in other words, that the axon process of each nerve cell, whenever it is cut, will in favorable conditions grow to its original length, neither more nor less.

It was observed by Von Monakov that after hemisection of the spinal cord just below the pyramids, the nucleus of Deiters underwent complete atrophy on the same side as the lesion. This author concluded, from an experiment on a single animal, that the nucleus of Deiters has no special connection with the eighth nerve, but is situated on the path of the sensory or afferent fibers passing from the spinal cord to the brain. Ferrier and Turrer, in 1893, obtained in cases of cerebellar lesion complicated by a lesion of Deiters's nucleus, degeneration of some fibers in the antero-lateral region of the cord on the same side as the lesion, and concluded that the fibers in question were probably derived from the cells of Deiters's nucleus. In this view they were supported by the researches of Risieu Russell, while they were opposed by the conclusions of Marché and Thomas that removal of the cerebellar hemisphere alone without any injury of Deiters's nucleus was followed by descending degeneration of some of the fibers of the antero-lateral region of the cord. Such fibers had been recognized by Löwenthal as undergoing a degeneration below a hemisection of the upper part of the spinal cord. A further investigation of the subject has been made by R. E. Lloyd, the result of which goes to show that hemisection of the upper part of the cord is followed

by chromatolysis of the cells of Deiters's nucleus on the same side as the lesion, and to render it probable therefore that the fibers of the antero-lateral descending tract are derived from the cells of that nucleus, and not from the cerebellum.

Nicolas Alberto Barbieri has found that in cats, dogs, rabbits, and guinea pigs the unipolar or bipolar cells of the spinal ganglia do not form any connection with the nerve tubes of the posterior roots. These cells may be dissolved by chemical means without altering the form, contour, or even the continuity of the nerve fibers of the posterior roots. Each spinal ganglion contains from 200 to 500 cells, while the number of nerve fibers that traverse the same ganglion is from 1,000 to 3,000. This number is about double that of the nerve fibers found in the anterior roots, which varies from 500 to 1,500. All the nerves of spinal origin contain a far larger number of fibers derived from the posterior than from the anterior root. Besides the ordinary fibers of the posterior roots, others of smaller diameter may be found enveloped by a thinner sheet of connective tissue, with less granular, more transparent, and almost limpid contents. The medullary and encephalic origin of the sympathetic is established to the satisfaction of the author by examinations of the branching and relations of the small fibers which are described in the paper. The cells of the spinal ganglia are found to be cells of the sympathetic from which the rami communicantes proceed. The whole number of the nerve fibers of all the roots of the spinal nerves is in the rabbit about 70,000, a number too small for the supply of all the tissues of the animal, while it is too large to come into relation with the surface of section of the collet du bulbe. The posterior roots spring from the posterior collateral fissure by small fasciculi. Each fasciculus contains a certain number of nerve fibers, and several fasciculi form a root, and several roots form a radicular root. Two or three radicular nerves separated from one another by the spinal dura mater are found on the superior surface of each spinal ganglion. The posterior roots penetrate the ganglion largely provided with connective tissue, or in the condition of a nerve. The anterior roots which arise from the ventral collateral grooves have an analogous origin, and unite externally and below the ganglion with the posterior radicular nerves to form the mixed peripheral or proto nerve. The mixed peripheral nerve of each pair of spinal nerves, after having given origin to the small meningeal branch, divides into two branches, the one anterior and large, the other posterior and small.

It has been observed that after reunion of a divided nerve by means of suture function may return sooner or later, and that this restoration of function implies not only simple return of sensation and the capacity to make voluntary movements, but also the re-establishment of complete localization of sensation and of co-ordination of movements. Care is usually given in suturing divided nerves to bring the two segments into as close an approximation as possible to their old relationship. Thus the perfect recovery of localized and co-ordinated functions might perhaps be due to a majority of the fibers being so placed in a position for a union of corresponding ends to be effected. This subject has been recently investigated by Dr. Robert Kennedy, of Edinburgh, in three experiments on dogs, in which the sciatic nerve was divided at the level of the trochanter, and in two of them rotated before suture to the extent of a semicircle, while in the third experiment accurate coaptation by suture in normal position was effected. In the matter of recovery

of function, the three experiments followed a practically identical course. Under microscopical examination the central segments showed the characters of the normal sciatic nerve with the exception that the lymphatic spaces were somewhat distended. The peripheral segments agreed in showing no old nerve fibers in any part examined either close to the seat of reunion or in the terminal divisions of the nerve. In their place were abundant young nerve fibers with well-defined characters. Lying between the young nerve fibers were degenerated remains of the old fibers, showing that Wallerian degeneration had taken place. The cicatricial segments were also all three practically identical in structure. In no case could continuity of nerve fibers from the central to the peripheral segment be traced. The author's conclusions were (1) that after section and immediate coaptation of a nerve restoration of conductivity and of voluntary function may be effected in a few days; (2) that this early restoration of conductivity need not be the result of the reunion of the old nerve fibers—that is, reunion by so-called first intention, or without Wallerian degeneration, but may be the result of regeneration of young nerve fibers in the peripheral segment; (3) that voluntary co-ordinated movements are regained equally soon, whether the two ends of the divided nerve are united as accurately as possible, so as to bring the corresponding ends of the nerve fibers into as near contact as can be attained, or whether, previously to reunion, the peripheral segment is twisted so that when united to the central segment noncorresponding ends of the nerve fibers are brought into contact; (4) that in the latter case it is left doubtful whether the restoration of function is due to the re-establishment of the old paths by decussation in the nerve cicatrix or to the reunion of ends of nerve fibers which do not correspond but which happen to be brought into apposition; (5) that in suturing a divided nerve no trouble need be taken to secure the coaptation of the two segments in the old relationship, for the simple approximation of the two ends, no matter in what relationship, seems to be all that is required.

In experiments on the work of the spinal nervous centers Mlle. J. Ioteyko has found that the marrow has double the power of resistance to fatigue possessed by the terminal organs—giving twice the work in response to the same excitation; and, second, that it is capable of remaining excited four times as long as the muscle without betraying any sign of fatigue. In short, the results obtained by the author indicate a great power of resistance in the special nervous centers, and go to show that they are able to furnish, without fatigue, an amount of work at least four times more considerable than the terminal apparatus.

From studies made upon rabbits, it is concluded by Ivor Ll. Tuckett that after section of the vagus nerve all the fibers will in time recover their function; that the recovery is more rapid and probably more complete in the case of fibers supplying striated muscle than of those supplying cardiac or unstriated muscle; that the inhibitory fibers recover function at least as rapidly as the motor fibers; that the recovered function of the "autonomic" fiber is even at the end of three years less than normal.

Prof. Hitzig, of Halle, discussing, in a Hughlings Jackson lecture before the Neurological Society, the localization of functions in definite areas of the cortex of the brain, advocated the view that such centers exist, and further contended that two sets of motor centers might be

distinguished—viz., a lower, subcortical, or reflex set called into play by impressions of hearing, vision, or other special senses; and a higher, cortical set, concerned with conscious, arbitrary motion.

The sheath of Schwann of medullated nerves has been shown by Dr. A. Gurrtsch to be genetically an exogenous and quite foreign mesodermal formation. The observation was made that it did not in the first instance closely embrace the medullary sheath, but that the space between the two was gradually filled up by the growth in girth of the axis cylinder and of the medullary sheath.

Special Senses.—A case of the cerebral lesions observed in an instance of complete acquired color blindness while achromatic vision was retained is described by Dr. George Mackay and Dr. J. C. Dunlop, of Edinburgh. The patient, a man of great mental capacity, sixty-two years of age, whose color sense had always been good, and who especially appreciated the bright colors of flowers, having become anæmic, all at once experienced serious defects in his eyesight, finding himself unable to read his letters or to recognize vivid colors in some children's dresses. On examination, Dr. Dunlop found him completely color blind, while his distant form sense was good. The external aspect of his eyes was natural, but every color appeared gray to him. The diagnosis was double homonymous hemianopsia, complete for color sense, incomplete for form sense about the point of fixation. During the two months following the examination the patient acquired greater facility in reading, but had no restoration of his color sense. In a little less than four months from his attack he suddenly developed a right-sided hemiplegia, and in five days afterward died. The post-mortem examination disclosed an atrophy of the temporal occipital convolution on both sides, affecting the lower edge of the occipital radiation. This atrophy was found to be due to a hyaline degeneration of the adventitia of the vessels, which had to a great extent cut off the blood supply, and had led to complete destruction of the proper elements, both fibers and cells, of the affected portions of the brain. The authors remark that in this case the total loss of color sense was associated with a bilateral lesion of the fusiform convolution so well defined and symmetrical that it is difficult to avoid the conclusion that the gray matter of that convolution is probably concerned in the perception of colors.

While until recently the smallest lateral difference of place that is just perceptible by vision has been given as from about 50" to 1' angular measure, Prof. George M. Stratton, using a modified method, has found that lateral difference of place of about 7" can be directly perceived. In the old method of determination, employed by Helmholtz and others, two parallel lines were brought together until they were just finally distinguished as two. In the experiments of Prof. Stratton, instead of using lines or points side by side, lines were so arranged end to end that the upper of two perpendiculars could be moved at will to the right or left, while still remaining exactly parallel to the lower line. The observer had simply to judge whether the upper line was continuous with the lower line, or to which side it was displaced. The result, which gives 7" as the limit of space distinction under these conditions, is interesting as explaining the experiments of Bourdon, according to which a difference of position amounting to only 5" gives a perceptible stereoptic effect.

In a study of the effects of repeated detonations on the ear, made during the firing at a camp in Natal, the German Dr. Müller examined 96 tympanums before and after the exercise. He observed notable alterations in 44 cases. Seven times multiple hemorrhages were remarked, manifesting themselves as minute droplets of blood, the flow in one case being as large as a lentil. In 37 other cases there was merely a diffused, more marked redness on the margin of the tympanum. As a rule, the ears on which alterations were remarked had been previously not quite normal. With 40 subjects the distance at which the tuning fork was heard was diminished. Rinne's test always gave positive results. In 26 cases words spoken in a low tone were not heard at 8.6 metres, the normal mean. Only four subjects complained of hummings and tinklings. The author believes that serious lesions are extremely rare with men who perform their two years of service. On the other hand, officers and underofficers whose duty it is to give instruction in firing during long periods often become partially deaf, and are afflicted with hummings. Retraction and bluntness of the tympanum are detected in such cases. Dr. Müller draws the conclusion from his experiments, that only men with perfectly sound ears should be received in the artillery.

The experiments of Weber on the least observable differences in the action of weight as interpreted by sensation led to the conclusion that to obtain an observable difference in sensation we must always add one third. Fechner, assuming that the increase is always the same proportionately, deduced the Weber-Fechner formula for stating the relation of stimulus to sensation in quantitative terms, which may be thus expressed. To obtain an arithmetical series of sensations a geometrical series of stimuli is required. To give the former, equal increments of sensation are added; to obtain the latter, we must multiply the successive stimuli by the common factor. C. Lloyd Morgan, finding that the results of a large number of carefully conducted observations were not in accordance with this formula, has made continued studies of the subject, which are described in the Psychological Review and in Nature. From them he deduces a modification of the Weber-Fechner formula as follows: For constant increments of sensation the concomitant increases of stimulation are in geometrical progression. This differs from the Weber-Fechner formula in that it assigns the geometrical progression to the successive increments of stimulus.

Miscellaneous.—Researches by Prof. F. T. Paul on the development of dentine confirm the view that the process is practically similar to the formation of bone in membranes. Among the points brought to light is the fact that the young pulp contains a complete fibrous basis composed of delicate wavy fibers interlacing in every direction. These fibers are found to be directly derived from the cells, and are of a gelatin-yielding character. It is also shown that the first layer of cells found on the surface of the pulp beneath the ameloblasts are not odontoblasts, but develop into fibers, and on the actual surface these fibers blend together and form a membrane which lies just beneath the ameloblasts. The odontoblasts make their appearance subsequently, and insert themselves, as it were, between these fibrous surface cells, the nuclei of the latter undergoing atrophy. The odontoblasts are represented as being invested with a complete network of fibers derived from the connective tissue

of the pulp, these fibers meeting over the dentinal end of the odontoblasts so as to form a thin fibrous layer between these cells and the dentine matrix. The matrix is supposed by the author to be secreted by the odontoblasts into this layer of tissue.

As results of his studies of the development of the primordial cranium, Dr. Giuseppe Levi, of Florence, concludes that the first rudiments of the primordial cartilaginous cranium in man occur in the form of isolated groups of closely compressed connective-tissue cells in looser tissues than that which forms the membranous primordial cranium. A certain homology appears between these aggregations of cell groups and those of the future bone; but there is no homology between these rudiments of the skull of man and those described in mammals as parachordals and trabeculae. The rudiments preserve their identity for some time, even after their conversion into cartilage, by the possession of a perichondrial layer. They do not all coalesce till just before the chondrocranium has attained its highest development, when the chondrocranium for the first time forms one continuous whole. In the order of formation of the rudiments formed by connective tissue, that of the occipital bone is the earliest; after it follow those of the sphenoid and of the auditory capsules; and lastly that of the ethmoid. The differentiation of the several rudiments, progressing with unequal rapidity, is, as a rule, most rapid in the latest formed parts, and it presents characteristic features in each case, advancing quickly in the occipital region and almost contemporaneously throughout its whole extent, while in other instances it begins at a definite spot in a kind of cartilaginous nucleus and spreads uniformly outward. The enlargement of the rudiments is at first rapid, but afterward extremely slow. The development of the occipital region is similar to that of the vertebral column. The histological features of the formation of cartilage are particularly identical with those of this column, while they are different from those of all other segments of the skull. Moreover, there is one distinct rudiment of a vertebra—the occipital—which has a symmetrical origin, and farther forward are parts of an indeterminate number of vertebrae. The occipital region, like the vertebral column in the first stages of its development, is in connection with the chorda, but becomes distinct from it as the cartilage develops. These facts support Froriep's view that the occipital region represents the true spinal segment of the skull in man. "The symmetrical rudiments of the body of the occipital vertebra become the condyles of the occipital, the unsegmented portion represents the portio basilaris, and the lateral portion of the arch of the occipital vertebra the processus jugularis." Some changes of form take place in the development of cartilage through the absorption of parts of the rudiments and through alteration of the position of the occipital and sphenoid rudiments; and the floor of the sella turcica is the only segment of the skull which preserves its original position throughout the process of development.

In the preliminary experiments made by W. S. Halliburton for the purpose of testing the conflicting results reached by other investigators of the effects of injections of extracts of nervous tissues, all the extracts used produced a fall of blood pressure, partly by their effect on the heart, and partly by dilatation of vessels in the splanchnic area. The effect was more marked the greater the proportion of gray matter in the tissue used. It was not abolished by the section

of both vagi, but was abolished, as a rule, after atropine. The substance that produced the fall was not proteid, but was soluble in alcohol. From the alcoholic solution the author always obtained typical crystals of the platinum double salt of choline. Though the choline thus proved to be present was undoubtedly one cause of the fall in blood pressure, there were probably other substances that might be present as well, but they had not yet been fully identified; lactic acid was probably one. The depressor effect of lactic acid was not abolished by atropine; and this fact, it is suggested, may account for those cases in which the fall was not completely abolished by that substance. Glycerin itself (1 in 20 of saline solution) generally produces a fall of blood pressure, which is not abolished by atropine.

The name spermine is given to certain needle-shaped crystals which Charcot observed for the first time in the blood of leuko-erythemias, which Leyden had discovered in the expectoration of asthmatics, and which Schreiner found in sperm, and which were analyzed, identified, and characterized by Pöehl. The object of a research by Walter E. Dixon was to ascertain the effect of injections of spermine in order to determine how far the substance is responsible for the effects produced by injections of Brown-Séquard's fluid. It was shown by experiments made on cats that spermine produces a fall of blood pressure from which recovery is rapid and the normal level is soon reached. The effect is largely cardiac, but is also partly due to dilatation of vessels in the splanchnic area. The effect of the use of atropine is to cut out completely the fall of pressure, without, however, influencing the splanchnic dilatation. The vessels of the kidneys seem quite passive to the change of blood pressure. The effect on the splenic vessels is marked by the constriction of the splenic muscle. A stimulant effect on the involuntary muscles of mammalian intestine as well as on the isolated strip of frog's stomach is also noticeable. Spermine produces a gradual rise in the body temperature. A close resemblance exists in the effects upon the heart and circulatory system of the action of choline and of spermine, and the two substances are about equally toxic. The chief interest of spermine depends on the fact that it is constantly present in all tissues of the body, and in certain pathological conditions (leuko-erythemia and some nervous diseases) is increased. It is said to be present in the normal animal in greatest quantity in the testis and nervous tissue.

The presence of arsenic in the body has been studied by M. Armand Gautier, who communicated a paper on the subject to the French Academy of Sciences, Dec. 4. The author found this substance normally present in the thyroid gland in the proportion of 0.075 milligramme to 100 grammes of the dried gland. It is found also in the skin, hair, and nails, and in ox horns; in the mammary gland, and consequently in the milk which it elaborates. The brain of the foetus contains arsenic, as also does the brain of the newly born infant, but no trace of it was found in the adult brain of hospital patients. It also occurs in the bones, but was not found in the liver, pancreas, kidney, spleen, pituitary gland, stomach, and intestines. The last fact is of considerable importance, as it bears upon toxicological researches, for there results from it as an immediate consequence that if arsenic is found at any time in the stomach or an intestine it is not normal.

The remarkable changes made in recent years in the diameter and velocity of rifle bullets have

been followed by as remarkable changes in the character of the wounds produced by them. The subject has been experimentally investigated in the case of wounds inflicted in the South African War by Sir William MacCormac, who has been aided in his study by the light of observations which he made during the Franco-Prussian War. According to a summary of the author's observations given in the *Lancet*, the damage caused by the modern bullet, especially by the Mauser bullet, can not be compared in severity with that inflicted by the needle gun or the chassépot. The projectile bores a small clean hole right through the part, and the exit opening can hardly, if at all, be distinguished from that of entrance. The wounds are on the whole aseptic, and heal readily under a simple antiseptic dressing. When only the soft parts of a limb are perforated and no important vessels have been torn, the shock at the time of infliction of the injury is slight, and recovery is rapid and complete. Even when a bone has been hit the bullet may make a clean hole through it without any, or with only a very little, splintering. This is naturally more common in the case of flat bones, such as the scapula, than in the long bones; but it has also occurred in the case of the bones of the limbs. In many instances, even when important structures have been in the line of the bullet, no harm seems to have resulted. In one case where the direction of the wound indicated that the bullet must have pierced the stomach, no symptoms of any such injury appeared. In another case, where it seemed almost certain that the colon was perforated, while obstinate constipation followed the injury, no peritonitis arose. Not the least remarkable of the effects of the Mauser bullet is the very slight hæmorrhage resulting from the perforation of the lung. A little more hæmoptysis may result, but it soon ceases and convalescence ensues. Even when a comminuted fracture of a bone has been produced, complete consolidation of the broken bone may result. A slight case of perforation of a joint shows that only a slight synovitis may follow. These effects are very different from the havoc produced by a large-bore bullet.

"Plastic activity" is the term used by M. L. Ranvier to denote a phenomenon of change of form exhibited by cells in contact with an air bubble. Having gradually heated to 36° C. the peritoneal serum of a rat which contained some air bubbles, the author noticed that the lymphocytes of the fluid moved toward the bullæ, and on arriving at their surface became flattened, just as the cells would have done if they had impinged against a solid substance. When the temperature was allowed to fall to 21° C., the cells resumed their spheroidal shape; but on increasing the temperature they again became flattened. He regards the change of form as a consequence of the activity of the cell—that is, as a vital phenomenon, and looks upon it as showing that cells are highly sensitive and possess extremely delicate motor reactions.

By means of a process described by F. G. Hopkins a crystalline albumin may be separated from egg white which upon repeated fractional crystallization shows absolute constancy of rotatory power (30.7°) and a constant proportion of sulphur. The product is obtained with great ease and rapidity, and the yield is 50 grammes and upward per litre of egg white. The albumin has the percentage composition: Carbon, 52.75; hydrogen, 7.12; nitrogen, 15.43; sulphur, 1.57; oxygen, 23.13. It is obtained practically ash free. Albumin crystals obtained by the use of

ammonium sulphate may, as was shown in the investigation, be washed free from sulphate by means of a saturated sodium chloride solution containing 1 per cent. acetic acid, the crystals meanwhile retaining their form and their solubility in water. The crystals, being thus freed from adherent sulphate and dissolved in water, coagulation of the dissolved proteid liberates no further trace of sulphur. It is therefore unlikely that ammonium sulphate enters into the formation of the original crystal.

The results of two experiments made by John Haldane to test the supposition of Helmholtz that carbonic oxide is oxidized or otherwise destroyed in the living body were entirely negative, and the author was convinced by them that no destruction of the kind takes place to any appreciable extent.

Among the more notable books of the year on physiology are the two important cyclopædias of Prof. Schäfer, on the lines of the *Handbook* of Prof. Herrmann, the subjects being committed to the hands of experts, of Prof. W. H. Howell, of Johns Hopkins University, who has been assisted in the preparation of the work by several American physiologists of repute; one edited by Prof. Richet, of Paris, to extend to nine volumes, of which four are completed; the second volume of the *Traité de Physiologie* of Prof. Moya and Prof. Doyon; a text-book by Dr. Winfield Hall, of the University of Chicago; new editions of the *Manuals* of Waller, Stewart, and Starling; and a translation by Miss Emma Birstein of the well-known text-book of Storr.

PORTO RICO, an island of the West Indies, formerly a colony of Spain, ceded to the United States by the treaty signed at Paris on Dec. 10, 1898. In the beginning of 1900 it was under military rule until Congress should provide for the establishment of representative civil government. Gen. George W. Davis was the military governor.

Area and Population.—The area of the island is 3,688 square miles. The population in 1897 numbered 399,022 males and 399,554 females. In 1899 the total population was estimated at 957,000.

Commerce.—Since the tariff relations with the United States were settled commerce has increased rapidly, although the results of war and the hurricane of 1899 have lessened for the present the producing capacity of the island. In 1899 the imports from Porto Rico into the United States were \$3,179,827, already double as much as in 1895, and the exports from the United States to Porto Rico were \$2,685,848, nearly 50 per cent. greater.

Political and Economical Reconstruction.—The general condition of Porto Rico in the first period of American rule was unfortunate. The war had paralyzed the trade of the island, and when Spain surrendered the sovereignty she closed her ports to Porto Rican products, while the occupation of Cuba destroyed the only other important market. The trade in coffee and tobacco was ruined, and nothing was provided to take their place. In most cases money could not be procured by the planters to pay the interest on mortgages. Then in August, 1899, a terrible hurricane wrecked the plantations, destroying the food supplies and resources of the lower classes, killing over 2,000 and injuring over 3,000 persons, and sweeping away \$22,000,000 worth of property, including nine tenths of the coffee crop. The principal work of the army was to distribute 30,000,000 rations of one pound each to the famishing natives during the greater part of a year, and organize relief work on the roads, by which

wages could be earned by the idle men in improving the roads of the island, to which nearly \$1,000,000 were allotted by the Secretary of War. For the seacoast defense of the island the military authorities made provision for emplacing 309 heavy guns, 368 rapid-fire guns, and 372 mortars. Local officials were properly elected in September, 1899, and before the middle of February, 1900, mayors, town councils, municipal judges, and boards of education had been chosen and installed in all the towns. The military commander determined the qualifications of voters, which were the ability to read and write Spanish, English, or any other language, or the payment of \$1 in taxes during eighteen months preceding the elections. Under these conditions the number of votes polled reached 51,179, equal to 5.375 per cent. of the population. Although no armed soldiers approached the voting places, the elections were held under strict army supervision, and the returns were unquestionably honest. A tariff law was passed for Porto Rico by Congress, applying the rates of the Dingley tariff on imports from the United States and on Porto Rican produce into the United States 15 per cent. of those rates. Another bill, signed on March 25, devotes to the aid and relief of Porto Rico all the revenues collected from imports from the island into the United States under the Dingley tariff since the Spanish evacuation until otherwise provided. An act of Congress approved by the President on April 12, 1900, provided for the civil government of Porto Rico. On May 1 the military governor turned over to Gov. Allen the direction of civil affairs. The machinery of civil government was already in charge of experienced public officers, and in every municipality were officers chosen by the electors and exercising practically autonomous government. The insular treasury contained a balance of \$300,000. Much had been done to improve the sanitary conditions of the island. Compulsory vaccination saved the people from an epidemic of smallpox, and sanitary boards with large powers were established everywhere. Gov. Allen appointed a Cabinet. An Executive Council consisting of 6 Americans and 5 Porto Ricans is the upper house of the Legislature. Courts were established and worked satisfactorily excepting in regard to acts of violence growing out of political passions, in which cases the party allegiance of the judge often influenced his decision. The municipal police was likewise influenced by politics in dealing with offenders, and the insular police of the country districts, which was under the direct control of the central authorities, was much more efficient in preserving order. A general election was held on Nov. 6 for members of the Legislature, which was convened for the first Monday in December. There were two parties—the Republicans, led by Dr. José Barvosa, who supported the American administration upon the tariff and other measures, and the Federals, led by Muñoz Rivera, who demanded more autonomy. The island was districted by the Executive Council. Each district elected 5 of the 35 members of the House of Deputies. The same qualifications were provided as in the municipal elections, in which the Federals had a popular majority of 6,111.

The building of roads to bring the products of the interior to market was the most necessary improvement, undertaken by the Americans in connection with famine relief, and carried on until all the important towns have communication with the seaports. Except the military road from San Juan to Ponce and the three railroads running along the coast, the only means of transport,

even from the important coffee districts around Utuado and Adjuntas, was by pack mules over bridle paths. The longest of the new roads runs across the island through those towns from Arecibo to Ponce, 52 miles, with branches from Arecibo and Utuado to Lares, and roads from Lares to Aguadilla through San Sebastian and Moca and to Mayaguez through Las Marias. From Ponce a road passes through Guayanilla, Yauco, Sabana Grande, and San German to Mayaguez. Another road runs from the port of Humaco to Caguas on the military road and on to Comerio, to be followed by one running north from Comerio to Bayamon. Another goes from Morobis through Ciales to the railroad at Manati. Others connect Corozal with Bayamon and Toa Baja and Guayama with Arroya. A road from Comerio to Barranguitas and Barrios and connecting with the road from Utuado to Jayuya will complete the chain of new roads traversing the island from end to end, and crossing at right angles the old military road and the new road from Arecibo to Ponce. The new roads have a maximum grade of 7 per cent., and in the mountainous parts they cost \$25,000 a mile, 10 per cent. more than the Spanish military road, though most of them are built for \$10,000 a mile. Many schoolhouses have been built by the Government, which intends to have a school in every barrios. A normal school at Fajardo has been completed. Criminal bands that once infested the mountain districts have been driven out entirely by the insular police, and many of the leaders brought to justice. The administration of justice has in general been freed from political influence. The insular police, which has freed the land from bandits and maintains perfect order throughout the island, which the Spanish civil guards never did, because they were under political influence, was organized by a German-American soldier, Lieut. Frank Techter, except whom all the 19 officers and 440 men are Porto Ricans, and many of them belong to the most intelligent and cultivated classes; for without a strict examination no one is admitted, and only young men of courage seek the service. Porto Rico has been made a judicial district of the United States, and the organization of the judiciary is the same as in the United States. The sanitary condition of the island was formerly horrible, the people ignorant and careless of cleanliness and the rules of health. Filth, diseases, and epidemics were common. The military authorities, when they took hold, set the convicts in the jails to cleaning the streets of Ponce and San Juan, and native health officers induced the people to cleanse their premises and keep them clean. The general vaccination of the people was enforced by the insular police, with the result that not a single death from smallpox has since occurred, although there were 242 in the preceding six months. Markets, bakeries, and milk depots must now be kept clean, and a system of food inspection has been introduced. Schools, jails, and hospitals are for the first time kept in a sanitary condition. Anæmia, the most debilitating and fatal disease in Porto Rico, has been found to be due to a parasite, the ravages of which have already been lessened and will cease when filth is abolished. Under Spanish rule not 15 per cent. of the children went to school at all, and only 10 per cent. learned to read and write. A graded system of public schools has been introduced by the present Government, which has taken hold of the whole system of public education, and devotes to it 12 per cent. of the public revenue, twice the proportion assigned by the Spanish Government, and diverted in part to other purposes. In

each district an American supervisor was appointed. The insular Board of Education consisted of 2 Americans and 3 Porto Ricans. Instead of relying partly on fees for the support of the schools, the Government has made education perfectly free, but not compulsory, because there are not yet schoolhouses and teachers enough. Children are taught the English language and American history.

PORTUGAL, a kingdom in southwestern Europe. The throne is hereditary in the family of Saxe-Coburg-Braganza. The legislative power is vested in the Cortes, consisting of a Chamber of Peers, containing 52 hereditary, 13 spiritual, and 90 life peers, and a Chamber of Deputies, containing 120 members elected directly by all citizens possessing an elementary education or an income of 500 milreis. The reigning King is Carlos I, born Sept. 28, 1833. The Cabinet of Ministers, constituted on Aug. 18, 1898, consisted in the beginning of 1900 of the following members: Premier and Minister of the Interior, José Luciano de Castro; Minister of Foreign Affairs, F. A. da Veiga Beirão; Minister of Finance, M. A. de Espregueira; Minister of Justice and Worship, J. M. d'Alpoim; Minister of War, Gen. Sebastião Custodio de Sousa e Telles; Minister of Marine and Colonies, A. E. Villaga; Minister of Public Works, Industry, and Commerce, E. J. Sousa e Brito.

Area and Population.—The area of Continental Portugal is 34,528 square miles, with 4,060,095 inhabitants in 1890; area of the Azores and Madeira, 1,510 square miles, with 389,634 inhabitants; total area of the kingdom, 36,038 square miles, with a total population of 5,049,729. The population included 27,000 Spaniards, 5,000 Brazilians, 2,500 French, 1,786 English, 800 Germans, and 800 Italians. The emigration in 1898 was 230 to Europe, 4 to Asia, 21,422 to America, and 1,854 to Africa; total, 23,510. The birth rate in 1890 was 31.24 and the death rate 23.71 per thousand.

Finances.—The revenue for 1899 was 52,288,835 milreis, and expenditure 50,307,080 milreis; the estimated revenue for 1900 was 52,373,581 milreis, and expenditure 53,919,296 milreis. The estimates for 1901 make the revenue from direct taxes 12,249,370 milreis, from stamps and registration 5,506,000 milreis, from indirect taxes 24,294,050 milreis, from additional taxes 1,098,700 milreis, from national property and miscellaneous sources 3,506,935 milreis, *recettes d'ordre* 4,383,070 milreis; total ordinary revenue, 51,038,125 milreis; extraordinary revenue, 1,150,000 milreis; total revenue, 52,188,125 milreis. The estimated expenditures for 1901 are 9,774,954 milreis for the civil list, the Cortes, and various purposes, 19,954,094 milreis for the consolidated debt, 500,000 milreis for losses by exchange, 3,690,852 milreis for the Ministry of Finance, 2,411,051 milreis for the Ministry of the Interior, 1,057,389 milreis for the Ministry of Justice, 5,950,754 milreis for the Ministry of War, 4,377,128 milreis for the Ministry of Marine and the Colonies, 353,596 milreis for the Ministry of Foreign Affairs, 4,597,562 milreis for the Ministry of Public Works, and 69,338 milreis for the deposit and consignment office; total ordinary expenditure, 52,736,728 milreis, extraordinary expenditure, 2,112,229 milreis; total expenditure, 54,848,957; deficit, 2,660,832 milreis.

The public debt of Portugal, which was less than 9,500,000 milreis in 1853, had grown in 1890 to over 428,000,000 milreis. In 1892 the interest on the internal currency debt was reduced 30 per cent., and that on the external gold debt was reduced 60½ per cent. in 1893. In 1899 the ex-

ternal debt outstanding amounted to £62,901,275, consisting of £39,472,091 of consolidated 3-per-cent. debt, £1,811,497 redeemable and paying 4 per cent., £12,758,887 paying 4½ per cent., and the tobacco loan of £8,858,800, also paying 4½ per cent. The consolidated internal loan of £58,951,812, paying 3 per cent., was largely held abroad likewise, and there were £6,143,426 of other internal debts besides £27,579,446 of internal and £2,318,819 of external debt partly in the hands of the Government. The floating debt amounted to 43,822,549 milreis.

The gold standard was adopted by Portugal in 1854, and 7,950,002 milreis of gold coins were struck, but none since 1891. The silver coinage amounts to 30,232,436 milreis; the circulation of Bank of Portugal notes, 68,175,157 milreis.

The Army and Navy.—The peace effective of the Portuguese army is 48 officers and 795 men in the engineers, 298 officers and 4,419 men in the artillery, 276 officers and 4,020 men in the cavalry, 1,001 officers and 19,912 men in the infantry and chasseurs, and 10 officers and 557 men in the train and subsistence and health departments, with 81 officers and 297 men attached to reserve depots, making the total 1,804 officers and 30,000 men, with 5,404 horses and mules and 144 guns. This does not include 80 officers and 2,176 men in the municipal guards, nor 136 officers and 5,619 men of the fiscal guard. The war strength is stated to be 3,476 officers and 145,639 men, with 15,849 horses and mules and 312 guns, formed by raising the strength of the active army to 2,020 officers and 82,843 men, with 10,736 horses and mules and 216 guns, and calling out the reserve troops, numbering 1,447 officers and 62,796 men, with 5,113 horses and mules and 46 guns. The troops maintained in the colonies, the majority of them natives, number 9,478 of all ranks.

The Portuguese navy has 1 old ironclad, 5 protected cruisers, not all of them completed, 2 new and 4 old third-class cruisers, 10 river and 16 seagoing gunboats, and 15 first-class and 30 small torpedo boats. A national defense committee has raised funds by private contribution to help the Government strengthen the fleet.

Commerce and Production.—In the south of Portugal land is held in large estates and tenant farming prevails. In the north the holdings are small and are more highly cultivated because the peasants either own their land outright or hold it by the ancient custom of *aforamento*, subject only to a quitrent, for which the owner may distraint if not paid at the term, though he can not evict unless it remains unpaid for five years. The holder can do what he pleases on the land, and he may sell his tenant right and improvements, as the owner may his right to the quitrent, but in either case the other has the option of purchasing in preference to a third party. Corn and cattle are raised in northern Portugal, in the mountainous parts rye, sheep, and goats, wheat and corn in the center, wheat and hogs in the south, where the cork bark is cut, grapes everywhere, olives, figs, and oranges in many places, tomatoes extensively, and a great many potatoes and onions. The fishermen of Portugal have 4,000 boats, and the sardines and tunny that they catch are exported, the value of fish exports in 1898 having been 3,717,606 milreis. The minerals raised in 1898 were valued at 1,717,828 milreis, consisting of copper precipitate and ore, sulphur ore, lead, arsenic, tin, manganese, antimony, and iron ores, wolfram, and a little gold and silver. Salt, gypsum, lime, and marble are exported. The total value of special imports in 1898 was 50,822,766 milreis, and of exports 33,207,165 milreis. The

imports of live animals were 3,141,986 milreis in value, and exports 3,350,568 milreis; imports of raw materials 20,155,307 milreis, and exports 5,109,854 milreis; imports of textiles 5,063,041 milreis and exports 2,725,866 milreis; imports of food and drink 13,338,880 milreis, and exports 18,015,928 milreis; imports of machinery and implements 2,913,336 milreis, and exports 105,111 milreis; imports of various manufactures 3,341,521 milreis, and exports, 1,820,863; tax on imports, 72,861 milreis; total imports of merchandise, 48,626,938 milreis; total exports of merchandise, 31,127,990 milreis; imports of coin and bullion 2,195,828 milreis, and exports 2,079,175 milreis. Of the particular imports the value of wheat was 3,658,152 milreis; raw cotton, 3,532,067 milreis; cotton goods and yarn, 2,866,055 milreis; sugar, 2,042,165 milreis; codfish, 1,193,818 milreis; coal, 1,873,192 milreis; iron, 1,335,508 milreis; cattle, 1,219,317 milreis; leather and hides, 1,193,818 milreis; wool, 1,149,837 milreis; woollen goods and yarn, 1,025,065 milreis; coffee, 670,589 milreis; leaf tobacco, 467,813 milreis. The wine exported in 1898 was valued at 11,480,972 milreis, consisting of 52,402,630 litres of common wine and 34,006,900 litres of liqueur wine, of which 2,430,150 litres were Madeira and 31,328,410 port. The common wine is shipped mainly to Brazil and Portuguese colonies, the port and Madeira to England. The principal other exports were cork of the value of 3,303,273 milreis; cotton goods, shipped to Portuguese colonies, 2,347,963 milreis; sardines, 1,523,706 milreis; copper ore, 766,096 milreis; cattle, 656,142 milreis; olive oil, 511,487 milreis; almonds, 482,076 milreis; figs, 396,087 milreis; horses, 368,493 milreis; eggs, 342,900 milreis; tunny fish, 291,098 milreis; onions, 263,829 milreis; pineapples, 241,413 milreis. Of the total value of imports 32 per cent. came from Great Britain, 14 per cent. from the United States, 14 per cent. from Germany, 10 per cent. from France, 9 per cent. from Spain, and 21 per cent. from other countries; of the total exports 28 per cent. went to Great Britain, 20 per cent. to Brazil, 16 per cent. to Portuguese colonies, 13 per cent. to Spain, and 23 per cent. to other countries. Of all the wines imported by Great Britain in 1898, the wines of Portugal formed 24.6 per cent. of the quantity and 21.6 per cent. of the total value.

Navigation.—The number of vessels in the foreign trade entered at Portuguese ports during 1898 was 6,525, of 8,923,129 tons; cleared, 6,502, of 8,981,434 tons. Of the number entered, 4,182, of 6,113,127 tons, had cargoes; of those cleared, 5,160, of 7,187,090 tons, had cargoes. In the coasting trade, 4,309 vessels, of 1,363,197 tons, were entered and 4,217, of 1,298,055 tons, cleared.

The commercial marine on Jan. 1, 1899, comprised 63 steamers, of 60,000 tons, and 573 sailing vessels, of 69,522 tons, inclusive of vessels in the colonies.

Railroads, Posts, and Telegraphs.—There were 1,464 miles of railroad in operation in 1898, of which the Government owned 507 miles. The number of passengers carried in that year was 11,384,737; tons of freight, 2,034,603; net receipts, 3,377,835 milreis. The length of telegraph lines was 4,584 miles, with 9,475 miles of wire. The number of telegrams sent in 1898 was 1,272,042 in the internal and 1,065,309 in the international service.

The number of letters, newspapers, etc., forwarded through the post office during 1898 was 55,201,810 internal and 10,202,493 foreign and colonial.

Politics.—The derangement of the Portuguese finances and the measures adopted to meet the

obligations of the Government have caused widespread discontent without loosening the control of the Government over the electorate, which returned the usual loyal majority in the elections of November, 1899, although the Opposition was less submissive in character and included three Republicans from Oporto. Republicanism has gained many adherents, especially among the working classes. When the Cortes met on Jan. 2, 1900, the Government could boast of the success of a military expedition over the tribes in northern Mozambique that make Portuguese territory a base for raids upon the British semicivilized natives of Nyasaland. The financial proposals of the Government involved an increase in taxation. A proposal of Ferreira Almeida to sell certain colonies in order to relieve the financial embarrassment was rejected by a majority of 64 votes after a statement of the Ministry of Marine that the Government would maintain the integrity of the colonial territory. A meeting of Republicans in Oporto to protest against this and against the passage of British troops through Portuguese territory in South Africa to operate against the Boers was dissolved by the authorities. The Progressist ministry retired on June 21, having incurred the King's displeasure by submitting a measure attacking hereditary right, meant to apply to the peerage only, but not expressly restricted to that, which gave Prof. Afonso Costa, of the University of Coimbra, one of the Republican Deputies, an opportunity to discuss the conditions of the exclusion of the heir to the throne from the succession and the consequences that would arise. Senhor Ribeiro, the Conservative leader, formed a Cabinet on June 23, as follows: Premier and Minister of the Interior, Hintze Ribeiro; Minister of Foreign Affairs, Senhor Joarroyo; Minister of Finance, Anselmo Andrade; Minister of Justice, Campos Henriques; Minister of War, Pimentel Pinto; Minister of Marine, Teixeira Sousa; Minister of Public Works, Pereira Santos. The new Cabinet announced that it would watch attentively over colonial affairs, and would seek by means of reciprocal treaties to further Portuguese products in foreign markets; that it would also accomplish in their integrity the engagements made with the creditors of the state according to the law of May 20, 1893. In November new elections were held. The chief Republican paper was suppressed and the Government wrested all three Oporto seats from the Republicans. The results gave the Ministerial party 90 seats, the Opposition 28, and Independents 9.

PRESBYTERIANS. I. Presbyterian Church in the United States of America.—The following exhibit of the statistics of this Church is from the Comparative Summary by W. H. Roberts, stated clerk, published with the journal of the General Assembly for 1900: Number of synods, 32; of presbyteries, 232; of churches, 7,750; of ministers, 7,467; of candidates, 973; of licentiates, 380; of elders, 28,605; of deacons, 9,895; of communicants, 1,007,689; of members of Sunday schools, 1,058,051; of members added on examination during the year, 57,183; of baptisms, 21,620 of adults and 26,253 of infants; of churches organized, 165; of ordinations of ministers, 286. Amount of contributions: For home missions, \$1,088,367; for foreign missions, \$822,811; for education, \$117,139; for Sabbath-school work, \$117,702; for church erection, \$115,852; for the Relief fund, \$97,055; for the freedmen, \$161,537; for synodical aid, \$91,551; for aid for colleges, \$213,731; for the General Assembly, etc., \$79,833; for congregational purposes, \$11,372,283; miscellaneous contributions, \$776,330.

The Board of Home Missions reported to the

General Assembly that its total receipts for the year had been \$733,124, and its expenditures \$730,548; hence it had closed the year with a balance of \$2,576. It had employed 1,371 missionaries, including 25 Mexican and Indian helpers, with 372 missionary teachers, and returned a total membership in the mission churches and stations of 77,181, with 88,510 attendants in the congregations; 16,311 Sunday schools, with 117,773 members thereof; 223 Sunday schools organized during the year; 3,229 baptisms of adults and 3,523 of infants; 7,770 additions on examination; 33 churches organized, and 16 reached self-support; 57 church edifices built, at a cost of \$115,483, and 273 repaired and enlarged, at a cost of \$54,551; 1,519 church edifices in all, having a total value of \$2,943,234; 399 parsonages, valued at \$412,530; and \$89,258 of church debts canceled.

The Board of Education had under its care 294 students in colleges and 399 in theological seminaries. Its entire receipts had been \$93,194, and its expenditures \$85,977.

The Board of Relief had had 903 names on its list—of ministers, widows, orphan families, and other beneficiaries. One hundred and eleven names had been added during the year to the roll of annuitants. The honorably retired roll of ministers more than seventy years old who had been thirty years in service and desired to receive the annuities of the board (not exceeding \$300 each) contained 127 names, while 232 ministers had availed themselves of its privileges since 1880. The average amount paid to ministers on this roll was \$282.87, and the average amount paid to all annuitants was \$199.48 annually. The receipts of the board from all sources had been \$194,890.

The total resources for the year of the Board of Aid for Colleges and Academies had been \$181,576.

The Board of Missions for Freedmen had under its care 199 ministers, 339 churches and missions, 19,588 communicants, 1,841 of whom were added on examination during the year, 324 Sabbath schools with 10,582 scholars, and 64 day schools with 231 teachers and 9,132 pupils. Its entire receipts for the year had been \$155,033, or \$5,600 more than the receipts of the preceding year. The board had nearly \$1,000,000 of permanent property. The freedmen had raised more than \$71,763 for self-support during the year, none of which was included in any of the accounts of the board. Industrial instruction was given at all the important schools.

The total receipts of the Board of Foreign Missions had been \$957,521, and its total disbursements \$935,351. The board had under its care 117 principal stations and 1,172 out stations, with 720 American missionaries (including 233 ordained ministers, 46 physicians, 13 lay missionaries, 253 married women, 149 single women, and 26 woman physicians), 1,701 native missionaries (including 170 ordained ministers, 398 licentiates, and 1,133 other workers), 626 organized churches, 37,820 communicants, 66 students for the ministry, 702 schools having 23,929 pupils, and 26,611 pupils in Sabbath schools. The number of additions during the year was 4,442. The missions were supplied with 8 printing establishments, and 35 hospitals and 47 dispensaries where 321,836 patients had received treatment.

The Woman's Board of Home Missions in its annual report returned 126 schools and missions and 372 missionaries and teachers, with 8,446 pupils. Its total receipts had been \$345,857, of which \$55,736 were for the freedmen's depart-

ment. During the twenty-one years of its existence the board had secured \$5,082,000, of which amount \$750,000 had been invested in buildings.

The one hundred and twelfth General Assembly met in St. Louis, Mo., May 17. The Rev. Charles A. Dickey, D. D., was chosen moderator. The special committees on the celebration of the advent of the twentieth century appointed by the previous General Assembly reported the details of the plan which had been adopted in general by that body for the observance. They included special religious services during the week of prayer of 1901; the setting apart of the first Friday of the meeting of the General Assembly in that year for appropriate exercises, including a review of the history of the Church during the nineteenth century at the morning session, a forecast of the outlook for the twentieth century at the afternoon session, and popular addresses at a session to be held in the evening; the raising of a special memorial twentieth century fund for the endowment of Presbyterian academic, collegiate, and theological institutions, for the enlargement of missionary enterprises, for the erection of church buildings and the payment of debts upon churches and educational institutions, and for the other work of the boards at the option of the donors; and the constitution of a committee of four ministers and three elders, with headquarters at Philadelphia, to have a general supervision of the enterprise. It was also arranged that the meeting of the General Assembly of 1901 should be held in Philadelphia, where the body was organized. Numerous overtures having come to the Assembly respecting a revision of the Confession of Faith, the subject was referred to a subcommittee of the Committee on Bills and Overtures. This committee reported concerning the overtures that, of 38 presbyteries sending them in, 8 asked for revision as their first preference, 1 asked for a new declaratory statement, 20 asked for a new and shorter creed, and 9 asked for a committee to consider the whole subject and report to the next Assembly. "Your committee," the report continues, "deem these overtures of such nature and number as to justify some action on the part of the Assembly. But the overtures are of such variety and suggest so many paths of process that they hardly furnish sufficient data to justify a distinct trial of any of the plans proposed. To enter at once either upon the revision of our present creed or the preparation of an explanatory statement would be to commit ourselves to undertaking some one of the proposed methods of creedal change, without sufficient knowledge of the mind of the Church to warrant reasonable expectation of approval. On the other hand, to decline all action would be to ignore a condition that seems to demand attention, and which involves a wide misrepresentation of our doctrinal position. We therefore recommend, first, that a committee of 15—8 ministers and 7 elders—be now appointed by the moderator to consider the whole matter of a restatement of the doctrines most surely believed among us, and which are substantially embodied in our Confession of Faith. Second, that this committee be enjoined diligently to pursue their inquiries, seeking light and knowledge from every available source, and to report to the next General Assembly what specific action, if any, should be taken by the Church. Third, that to further the work of the committee the presbyteries be and are hereby invited by the Assembly to take action at their approaching fall meetings and through the Assembly's stated clerk to report said action to

the committee, whether suggestive, revisional, supplemental, or substitutional changes, or no change at all." The recommendations of the committee were adopted. The committee appointed in pursuance of them consisted of the Rev. Drs. Charles A. Dickey, moderator, chairman; Herrick Johnson, Samuel J. Niccolls, Stephen W. Dana, Daniel W. Fisher, William McKibbin, Samuel P. Sprecher, George B. Steward; and elders E. C. Humphrey, Daniel W. Noyes, William R. Crabbe, John E. Parsons, Elisha Frasher, Benjamin Harrison, and John H. Harlan. A change in the method of appointing the committees of the Assembly had been suggested by the presbytery of Peoria in an overture sent to the preceding General Assembly, but had not been acted upon by it. The plan had become known throughout the Church as "the Peoria overture." The committee to whom the subject was referred presented majority and minority reports upon it. The majority report recommended that the rules bearing on the subject be amended so as to include a provision that "the moderator shall upon the organization of the Assembly appoint a committee of ministers and elders to aid him in the appointment of standing committees, said committee to be composed of 21 commissioners from different parts of the Church, not more than 2 of whom shall be from any one synod." The minority report was the Peoria overture itself, and was as follows: "For the purpose only of electing standing committees the General Assembly shall be divided into 22 electing sections of as nearly as practicable equal size, by combining the smaller synods and dividing the larger by presbyteries where necessary. The standing committees, except those on mileage and finance, shall be numbered consecutively; the electing sections shall be numbered in like manner.

"The standing committee shall consist of 11 ministers and 11 elders, excepting those on mileage and finance, which shall each consist of 11 elders. On odd-numbered years each odd-numbered section shall elect 1 minister for each odd-numbered committee, and 1 elder for each even-numbered committee, and 1 elder for the finance committee. On the same year, each even-numbered section shall elect 1 minister for each even-numbered committee, and 1 elder for each odd-numbered committee, and 1 elder for the mileage committee. On the even-numbered years this order shall be reversed. The standing committees shall elect their own chairmen." The minority report was substituted by amendment for the majority report, and was adopted. In the matter of "vacancy and supply" the Assembly provided for the constitution of a committee in each presbytery to have supervision of all vacant churches within its bounds, whose duty shall be to prepare and keep a list of such churches and of the effective unemployed ministers of the presbytery, and to arrange for the supply of the churches from the list of available ministers and from such other sources as may be suggested by correspondence; and, further, of similar committees with like duties for the synods. The case of the Rev. Dr. A. C. McGiffert, charged with having published doctrines contrary to the Presbyterian faith in his book *The Apostolic Age* (see *Annual Cyclopædia* for 1898, page 651, and 1899, page 728), having been removed from the purview of the General Assembly by his withdrawal from the Presbyterian Church, a minute was adopted declaring that "the case be and is hereby closed." An amendment proposed to the section of the Form of Government defining the constitution of a pres-

bytery prescribing that only active members shall vote was sent down as an overture to the presbyteries. The resolutions on Sabbath observance pronounced any and all secularization of the Christian Sabbath day destructive of its beneficent design and inimical to both public and private morality; declared the preservation of the Sabbath to be dependent on the action and influence of members of the Christian Church; and after particularizing various current forms of secularization, affirmed that "any and all efforts to promote commercial or business interests and financial gain at the expense of the sacred character and religious uses of the Christian Sabbath are inimical to the best interests of society and the state."

The McGiffert Case.—The case of Prof. A. C. McGiffert, of Union Theological Seminary, charged with the publication of heresies in his book on *The Apostolic Age*, was referred by the General Assembly of 1899 to the Presbytery of New York for action. When it was afterward brought up at a meeting of the presbytery the charges were dismissed: At the semiannual meeting of the presbytery, April 9, Prof. McGiffert presented a letter requesting that his name be dropped from the rolls. In making this request, the writer declared that his withdrawal was not because he regarded the charges of heresy preferred against him as well founded, or because he recognized the justice of the accusations that had been made—for he still believed that his views were in harmony with the faith of the Presbyterian Church and of evangelical Christendom in all vital and essential matters; but he could not feel that it was his duty to go through the trial before the General Assembly which an appeal from the action of the presbytery would precipitate, and needlessly to prolong the agitation of the subject. He regarded the principles on which heresy trials are conducted and their judgments governed as, from the point of view of the honest seeker after truth, fundamentally unsound. "Only by patient study and free discussion can the truth be reached, and the attempt to determine the correctness or incorrectness of historical conclusions by their conformity to a confessional standard tends to obscure truth's supremacy and to promote indifference to its claims." Prof. McGiffert had felt it his duty to maintain as far as he could the historic rights of Christian scholarship and the historic liberty of Christian thought and speech within the Presbyterian communion by refusing to withdraw even at the suggestion of the General Assembly. "For while it can matter little whether the particular views I hold are pronounced sound or unsound by an ecclesiastical tribunal, it matters much whether a great Christian communion like the Presbyterian Church, which has stood in the past for stalwart, intellectual Protestantism, shall commit itself irrevocably to the unprotestant policy of closing its eyes to all new light, and so make it increasingly difficult, if not impossible, for honest seekers after truth to do with its ranks their part of the one great work to which God has called his people." He had therefore remained within the Presbyterian Church, and had even been prepared to face a trial, but the action of the presbytery in dismissing the charges against him had relieved him from the particular responsibility resting upon him, and made it possible for him to withdraw without detriment, and even, he believed, with advantage to the cause of truth and liberty.

The presbytery unanimously, by resolution, expressed the sincere personal affection of the members for Prof. McGiffert.

Prof. McGiffert's name was presented for admission to the Manhattan Congregational Association April 11, and was referred according to the rules of the body.

Revision of the Confession.—The committee of the General Assembly on revision of the creed in August sent out a note to the presbyteries reciting the action of the General Assembly, and asking them a number of questions the answers to which would be helpful to a full and clear understanding of the mind of the Church. These questions, the committee explained, were simply suggestive, putting no restrictions upon the presbyteries except that it should be remembered that the committee was not empowered to consider any suggestions conflicting with the system of doctrine taught in the Holy Scriptures and contained in the Confession of Faith. The questions were: "(1) Do you desire a revision of our Confession of Faith? or (2) do you desire a supplementary, explanatory statement? or (3) do you desire to supplement our present doctrinal standards with a briefer statement of the doctrines 'most surely believed among us,' expressing in simple language the faith of the Church in loyalty to the system of doctrine contained in the Scriptures and held by the Reformed churches? or (4) do you desire the dismissal of the whole subject, so that our doctrinal standards shall remain as they are, without any change whatever, whether revisional, supplementary, or substitutional? If your preference is for revisional action, state in what direction and to what extent you would have revision undertaken. The revision reported to the Assembly in 1892 might be helpful as a basis for judgment. If your preference is for an explanatory statement, indicate what specific points in the Confession the statement should cover. The committee considers it as quite evident that due regard to the above questions and suggestions may be of great service in contributing to a better knowledge of the mind of the Church on this important matter. The committee also would respectfully request the presbyteries, in reporting their action, to state the votes both in the affirmative and the negative." The committee met Dec. 8 to examine and compare the answers made by the presbyteries to their questions. They found: "1. That the returns plainly indicate that the Church desires some change in its creedal statement. 2. These returns indicate plainly that no change is desired which would in any way impair the integrity of the system of doctrine contained in the Confession of Faith. 3. These returns also indicate that a large plurality desire that changes should be made by some new statement of present doctrines. 4. These returns also indicate a desire upon the part of many presbyteries for some revision of the present Confession." The committee unanimously agreed to recommend to the General Assembly that some revision or change be made in the confessional statements. The determination of the method of formulating the changes that seemed to be desired was referred to a subsequent meeting of the committee, and a meeting was appointed to be held Feb. 12, 1901, when it was expected the preparation of a statement to be presented to the General Assembly would be considered.

II. Presbyterian Church in the United States (Southern).—The following is a summary of the statistics of this Church from the table published by the stated clerk, William A. Alexander, with the journal of the General Assembly of 1900: Number of synods, 13; of presbyteries, 79; of churches, 2,959; of ministers, 1,461; of candidates, 317; of licentiates, 70; of ruling elders, 8,845; of deacons, 7,733; of communicants,

225,890; of baptized noncommunicants, 40,629; of teachers in Sunday schools, 20,881; of pupils in the same, 141,507; of members added on examination during the year, 7,733; of baptisms, 3,051 of adults and 4,853 of infants; of licenses, 63; of ordinations, 48; of churches organized, 69. Amount of contributions: For home missions (assembly's), \$26,658; for evangelistic work (local), \$123,016; for the Invalid fund, \$15,030; for foreign missions, \$141,507; for education, \$90,812; for publication, \$7,848; for colored evangelization, \$11,332; for the Bible cause, \$4,803; for pastors' salaries, \$805,945; presbyterial, \$16,052; congregational, \$667,268; miscellaneous, \$122,875.

The increase in the number of communicants for the year was 4,696, or about 2 per cent. of the membership. The average contribution was about \$9 per member.

The Executive Committee of Home Missions reported to the General Assembly that its total receipts for the year, including the balance of \$12,088 from the preceding year, had been \$43,690. Its expenditures on field work had been \$30,433. It had supported, fully or partly, 137 missionaries for the whole or part of the year. Six hundred dollars had been loaned from the regular loan fund to four churches, making the total amount of loans to white churches during the fourteen years since the fund was instituted \$7,905. Of this sum, \$3,078 were outstanding and the Assembly had canceled \$404 on two loans. Two hundred and fifty-five dollars had been loaned about ten years to five colored congregations, of which \$128 had been returned, and the Assembly had canceled the rest. From the Moore Church Erection fund, the total assets of which were given as \$5,244, \$1,450 had been loaned to five congregations. Since this fund had come into the treasury loans amounting to \$6,275 had been made to 24 churches, and \$3,709 had been paid back. The regular loan fund loans were made as debts of honor without interest; the loans from the Moore fund were secured by mortgage on the church property. The resources of the Invalid fund for the year had been \$15,370, and from it \$13,856 had been paid to 149 beneficiaries—ministers and widows and families of ministers. Ten new ministers and five families of ministers deceased had been added during the year to the list of beneficiaries. In addition to the ordinary work of the committee, the report presented the conditions of its work in the Indian Territory and New Mexico, and among Mexicans in Texas.

The Executive Committee of Education for the Ministry reported all but two of the presbyteries as co-operating with it—a larger number than for many years before. It had received from all sources \$18,335, the receipts resulting from the regular collections having been the largest since 1895. One hundred and ninety-five beneficiaries had been enrolled, or 20 less than in the previous year. The proportion to the entire number of candidates of those aided through the committee was remarked upon as being very large. Three of the persons aided were strangers, a fact which suggested doubts to the committee as to the legality of extending aid to such persons. On this subject the Assembly advised sessions and presbyteries not to receive candidates who had been rejected or dropped by other presbyteries or ecclesiastical bodies without correspondence with such bodies.

The Executive Committee of Colored Evangelization had received \$8,454 on the general fund for colored evangelization and \$539 on the special or improvement fund of Stillman Institute—the whole being an increase of about \$1,000 over the

previous year. Its work had been extended by entering new fields, and it had aided in the construction of two churches and the purchase of one manse. Work done by white people in the mission Sunday schools for colored people was especially mentioned, and comprised 179 teachers instructing 1,987 pupils in 37 Sunday schools. Fifty-three ministers had been sustained in whole or in part by the committee, some of them having been otherwise supported by white presbyteries. The total sum of \$3,094 had been paid to colored ministers and churches. Report was made of the work of Stillman Institute, Tuscaloosa, Ala.; Ferguson-Williams College, Abbeville, S. C.; and North Wilkesboro Industrial Institute, North Carolina. A preachers' institute of colored ministers had been held during ten days in June, 1899, at Stillman Institute; but while the object of instructing the ministers was successfully pursued, the committee had failed to accomplish the other object which they had hoped to promote there, namely, the completion of the organization of the Independent Colored Presbyterian Church. This organization, which had taken the name of "The Afro-American Presbyterian Church," was opposed as a separate church by the two largest and most influential colored presbyteries—those of Ethel and Central Alabama—and it was doubtful whether those adhering to it would be able to sustain it as a vigorous, independent body. The Assembly's standing committee on this work insisted, however, that independent organization was the wisest solution of the questions relative to colored Presbyterians, and that that end should be kept in view by the Church.

The Executive Committee on Publication reported that the net assets of the publishing house were \$116,942. An increase of a little more than 25 per cent. had taken place in the business. The colportage work, also, had nearly doubled, and grants to an increased amount had been made. Four young men had been employed during the vacation of the Theological Seminary, and reported 18 Sabbath schools organized, with 70 teachers and 663 pupils.

The receipts for the year of the Executive Committee of Foreign Missions had been \$161,161, an increase over the previous year of \$16,171. The number of additions to the mission churches was 642. The committee expressed the conviction in its report that the principle of the subordination of the educational to the evangelistic side of the missionary work should be adhered to. Steps which had been taken to call the attention of the King of the Belgians to certain acts committed by the Zappo Zaps in the Congo Free State were approved by the General Assembly; and that body voted acknowledgments to the Methodist Episcopal Church, South, and to the Presbyterian Church in the United States of America for courtesies given in the mission fields, and to the Baptists for desires expressed in favor of co-operation and comity.

Seventy-four presbyteries reported 2,063 Sunday schools, with 18,791 officers and teachers and 131,561 scholars enrolled, and an average attendance of 94,163. These schools had contributed for all objects \$87,100. The General Assembly recommended that a general collection be taken in the Sunday schools for the advancement of the Sunday-school interests of the Church, and that at least one Sunday-school institute be held each year within the bounds of every presbytery.

The General Assembly met in Atlanta, Ga., May 17. Judge J. W. Martin, of Arkansas, was chosen moderator. The "permanent committee" appointed by the previous General Assembly to consider certain overtures on the subject of the

Church and Christian education, reported that its work had been mainly directed to securing the attention of the synods and presbyteries to the paper which had been adopted by the Assembly (see Annual Cyclopædia for 1899, page 730). Fifty-seven presbyteries had approved and recommended the paper and appointed permanent committees on Church and Christian education. Six presbyteries had indorsed or approved or commended the constitution and plan of organization proposed, but declined for the present to appoint permanent committees, while other presbyteries had failed to take definite action. Only one had expressed disapproval of the paper. Five of the 12 synods had approved and commended the plan, and had appointed permanent committees. The result of the canvass was regarded as indicating a greater interest in the subject than had been anticipated. Along with its report, the committee submitted a draft of a constitution for the proposed educational organization. It also communicated an enumeration of existing schools actually or virtually under Presbyterian control, which included 6 theological schools, 10 colleges and universities for young men, 41 colleges and seminaries for young women, 23 co-educational schools and colleges, 33 academies and high schools for young men, 7 orphanages, 9 Indian schools, and 6 colored schools. The committee was reappointed. The committee engaged in the preparation of a new hymn book reported progress. The old Psalms and Hymns was made the basis of the new collection, and a brief formal statement was presented of the rules and principles by which the committee had been guided in selecting and arranging the hymns and tunes. An effort to raise \$1,000,000 for the permanent work of the Church, to be known as the Twentieth Century fund, was approved, and a committee, consisting of a minister and an elder from each synod, was appointed to have general management and oversight of it. The object of the fund was defined to be "to promote and put upon a surer basis the cause of Christian education; to endow and equip more fully our theological seminaries, our schools, colleges, and other institutions of learning; . . . and to found such new institutions of similar character as may seem advisable." The Assembly advised that this movement should not interfere with or displace plans that were now in operation in different parts of the Church looking to the same end, but should rather seek to unify all these local efforts and stimulate and encourage them through sympathetic co-operation. The synods were invited to appoint each a committee of three to co-operate with the Assembly's committee. A committee was appointed to prepare a catechism on the nature and government of the Church. The Assembly declined to grant the prayer of an overture asking for the insertion of a clause in the Confession of Faith, declaring that all dying in infancy are elect infants and regenerated, on the ground that "the present language of the Confession can not, by any fair interpretation, be construed as teaching that any of those who die in infancy are lost"; and this answer was ordered printed as a footnote in future editions of the Confession of Faith. The report of the Permanent Committee on the Sabbath, finding the desecration of the Lord's Day generally increasing, urged upon all the presbyteries the duty and responsibility of holding up the subject of more faithful observance constantly before the churches, with a view of awakening a deeper interest, and warned the people of the Church against the great danger of becoming through their patronage "partakers of other men's sins" by having anything to do

with any of the great agencies of Sabbath desecration. A special pastoral letter on worldly amusements (including the dance, the theater, and the card table) affirmed that "Christians can not afford to do those things which are looked upon as belonging peculiarly to the world, and by doing which the line of separation between the world and the Church is erased or obscured . . . because experience shows that persons engaging in worldly amusements are easily led into such indulgences as are wrong in themselves. . . . Worldly amusements and the company into which they often bring those engaged in them are not favorable to growth in grace and loving service of God in the Church. It can not be denied that those who indulge in worldly amusements do not become eminent for piety, do not hunger or thirst after God, and do not excel in Christian work. It is touching such matters as these, not things evil in themselves only, but also things considered evil or associated with evil, that Christians must practice self-denial and lead lives which will mark them as separate from the world." In answer to an overture touching the introduction of the theatrical and spectacular into the programmes for Children's Day, the Assembly directed the exercise of the greatest care in the preparation of such programmes, "to provide only that which is scriptural and appropriate."

Afro-American Presbyterian Synod.—The Synod of the Afro-American Presbyterian Church met at Bethel Church, near Dillon, S. C., Nov. 15. The Rev. J. M. Coleman was chosen moderator. At a popular meeting held in the interest of education, Ferguson-Williams College and the Academy at Wilkesboro, N. C., were reported as doing well except that Ferguson-Williams College was burdened with a debt of \$5,000. A popular meeting was held in the interest of home and foreign missions. All the presbyterial records were examined and approved with one exception. The next meeting of the Synod was appointed to be held in Abbeville, S. C., in November, 1901.

III. United Presbyterian Church in North America.—The statistical reports of this Church for 1900 give it 13 synods, with 68 presbyteries. The whole number of ministers is 997, of whom 684 are registered as pastors and stated supplies and 313 as "without charge"; number of licentiates, 75; of licensures during the year, 26; of students of theology, 69; of ruling elders, 3,919; of congregations, 996; of pastoral charges, 821; of congregations organized during the year, 20, while 7 were dissolved; of mission stations, 486, of which 468 were in the foreign field; of members, 128,836, of whom 115,901 were in America and the rest in the foreign missions; of members received on profession during the year (in the whole Church), 6,517; of baptisms, 3,961 of infants and 1,326 of adults; of Sabbath schools, 1,171, with 12,655 officers and teachers and 116,091 pupils; of Young People's Societies, 1,029, with 40,011 members. Amount of contributions (in America): For salaries of ministers, \$607,456; for congregational purposes, \$587,118; for the boards, \$282,202; for general purposes, \$137,518; total for America according to the footings of the table, \$1,614,294; total for the Church, \$1,637,425; average per member in America, \$14.06; average salary of pastors in America, \$1,039. Nineteen houses of worship had been erected during the year, at a total cost of \$125,755, and 9 parsonages at a total cost of \$17,197.

In the list of presbyteries, the Presbytery of Egypt, having been constituted a synod, appears divided into three new presbyteries, those of the Delta, Thebes, and the Thebaid.

The forty-second General Assembly met in Chicago, Ill., May 23. The Rev. Dr. J. P. Sankey was chosen moderator. Much attention was given to discussion concerning the administration of the article of the testimony on secret oath-bound societies. The subject had already received a large degree of consideration by pastors in their regular work, but had only within the past year become a matter of public discussion. While there had not been any material change in the sentiment against these societies, their multiplication had caused considerable difficulty in the admission of new members. A number of memorials on the subject had been sent in to the previous General Assembly, and it had appointed a committee to take it into consideration and report to the present Assembly. The report of this committee emphasized the importance of the question, and insisted that no backward step should be taken in the testimony of the Church concerning it, but that its unanimous judgment was that if changed at all, the expression should be strengthened rather than weakened. Only a change in the provision for administering the testimony was demanded to bring the Church into a closer alignment with Christ's teaching of discipleship. Certain modifications in the reading of the articles bearing upon the questions asked candidates for membership were recommended. The paper was referred after discussion to a special committee for revision and amendment, and its report was referred to a committee to report to the next Assembly, its conclusions to be published in the papers three months before the meeting of that body. A committee appointed by the previous General Assembly on the promotion of spirituality reported setting forth what they had endeavored to do through the Church papers to awaken members to a deeper sense of their obligations and a better use of their privileges. The Committee on Union with the Associate Reformed Synod of the South reported that no progress had been made toward organic union, but evidence appeared that the union sentiment was growing, and the relations of the two bodies were becoming more intimate and cordial. A report was made upon a question from a synod concerning divine healing, to the effect that no doubt much of the teaching on that subject arose from a misrepresentation of Scripture on the subject of Christ's redemption and the function of Christian faith, and was repugnant to sanctified common sense. It was proper to inquire of persons holding to such doctrines whether their opinions were founded on ignorance of Bible teaching or were heretical perversions of the principles taught in the word of God, and whether the non-use of recognized means of relief or cure was an error of judgment or criminal negligence. Only in the latter case, after due trial, should members holding these mistaken views be deprived of their good standing in the Church. Great interest was shown in the work of the Board of Education, toward which every presbytery and the Young People's Societies had made contributions. A report on reform covered the subjects of temperance, the Sabbath, secret societies, and polygamy. The part relating to the Sabbath urged the responsibility of members, and seconded the request of the Presbyterian Assembly asking Congress and State Legislatures to make no more appropriations to expositions unless they agree to close their gates on that day. The Assembly decided adversely to the baptism by United Presbyterian ministers of children whose parents are at the time members of another denomination, as a violation of interdenominational comity. Appropriations were made to the various enterprises of the Church as

follow: To foreign missions, \$132,822; to home missions, \$94,141; to freedmen's missions, \$55,000; to church extension, \$55,000; to education, regular work, \$8,000; colleges and seminaries, \$25,000; to ministerial relief, \$8,000; to Assembly fund, \$14,500; to publication, \$500. In addition to these amounts, \$24,000 were pledged to foreign missions by the Woman's Board and other parties.

The contributions made by the Woman's Board of Missions to the funds of the Church amounted for the year to more than \$82,000. The reports made at the annual meeting for 1900 show that since its organization, in 1886, this society had contributed more than \$600,000. The board publishes a general missionary magazine and a magazine for juniors, and sustains a training school at Xenia, Ohio.

The Freedmen's Mission returned nearly 800 members, with 14 schools, having an enrollment of 3,024 pupils; 10 Sabbath schools, with 138 officers and teachers; and 89 missionaries, 11 of whom were ordained ministers. The contributions had increased during the year from \$857 to \$2,024. The policy of the board had been to provide ministers and teachers from among the colored. A charter had been obtained for Knoxville College, empowering it to confer academic degrees. The debt of the board was \$16,082.

The annual meeting of the Young People's Christian Union was held in Denver, Col., late in June. A gain of 47 senior and 31 junior societies was returned, with a large increase of contributions by the junior societies. The reports showed that the number of professions of faith among the juniors was equivalent to two thirds of the net gain in membership of the Church during the year. Resolutions were passed urging the keeping of the Sabbath holy, opposing the use and traffic in narcotics and alcohol in any form, and regretting the existence of the army canteen in opposition to the wishes of the great majority of Christians.

IV. Reformed Presbyterian Church in North America—Synod.—The following is a summary of the statistics of this Church for the synodical year 1899-1900, as given in the report made to the Synod in May. The numbers from 12 congregations are taken from the reports of the preceding year: Number of congregations, 113; of mission stations, 8; of ministers, 124; of licentiates, 19; of students of theology, 7; of communicants, 9,790; of attendants upon Sabbath schools, 10,449; of attendants of Young People's Societies, 2,169; total amount of contributions, \$104,718.

The Synod met at Cedarville, Ohio, May 30. The Rev. F. M. Foster was chosen moderator. Mr. Foster, who had been one of the delegates to the Oecumenical Conference of Missions, but had not attended on account of the use of instrumental music and of hymns other than the Psalms in worship, reported concerning his "attempt and failure to secure the silencing of the organ and the use of the divine Psalms in worship." The delegates to the General Council of the Reformed and Presbyterian Alliance in Washington in 1899 reported to the effect that the character of the proceedings of the council was conservative and thoroughly biblical, and that the Psalms were used exclusively in worship without the organ. Yet the opinion was expressed by the speaker that the Alliance was manifestly and thoroughly opposed to the Reformed Presbyterian principle as to praise. A committee on an International Convention of Covenanters which it was proposed to hold in America in 1901 reported that after having cor-

responded with all the ministers of the Reformed Presbyterian Synods of Scotland and Ireland on the subject, they did not consider the information received such as would encourage the synod to decide upon holding the convention at the time designated. A special session was given to the subject of national reform, which was defined by one of the speakers as being a movement not so much to get the word God into the Constitution (as the public regarded it) as "to get God in Christ into the hearts of the people so completely that they will themselves put Christ into the Constitution and laws of the world." A memorial was addressed to Congress and all State legislatures asking that they make no more appropriations for expositions in this country or other countries without the proviso that such expositions shall be closed on the Lord's Day. The officers of the Synod were appointed a committee to prepare a memorial to the next Congress asking the abolition of all Sunday mails and mail trains, the closing on the Christian Sabbath of the Post Office Department at Washington and of all post offices in the United States, and the prohibition of all business and labor in the entire Post Office Department on the first day of the week, the committee in person to attend to the presentation of the petition.

V. Cumberland Presbyterian Church.—The statistical reports of this Church, made to the General Assembly in May, give it 180,192 members, a gain of 2,614 over the previous year. They show also gains of 4 in the number of churches with installed pastors, 36 parsonages, 117 Sunday schools, 10,000 in Sunday-school enrollment, 123 in the number of additions and 566 in that of baptisms, and 35 ordained ministers, while the number of missions and congregations awaiting organization had nearly doubled. Reductions appear of 22 in the number of churches without ministers, of 85 in that of churches without Sabbath schools, and of 22 in the number of ministers without charge. Thirty-six churches had been dedicated during the year, costing in all \$97,895, all but \$4,810 of which was paid. The contributions for education, ministerial relief, synodical missions, and miscellaneous causes had increased, while those for foreign missions, home missions, and church erection had fallen off considerably, entailing a decrease of \$55,262 in the total contributions of the church for all causes of which the actual amount was \$677,491.

The seventieth General Assembly met at Chattanooga, Tenn., May 17. The Rev. H. C. Bird, of Uniontown, Pa., was chosen moderator. The report of the Educational Society represented that an unusual interest in education had been manifested during the year, consequent upon the appointment of an educational commission by the previous General Assembly. The presbyteries were as a rule demanding that their probationers reach the required standard of knowledge, and were dropping those unwilling to do so. The receipts of the society for all purposes had been \$11,932, its indebtedness was \$1,260, and its permanent fund amounted to \$7,700. The Educational Commission appointed by the previous General Assembly reported a plan for four grades of schools above the primary, to include academies, colleges (of which there are five), one university for the whole Church, and a theological seminary, all adequately equipped and correlated to one another. The Board of Missions and Church Erection reported concerning the missions in Japan, China (Hunan), Mexico, the Indian Territory, and home missions. The offerings for church erection had amounted to \$2,303, and the

total contributions of the Church for missions had been \$97,727. The Board of Ministerial Relief had on its list of beneficiaries the names of 47 ministers and 59 widows of ministers. Its total receipts from all sources had been \$10,074, and its endowment funds amounted to \$19,674. The Board of Publication returned gross receipts of \$31,089, besides rents from its real estate. The Permanent Committee on Sunday Schools reported upon the condition and work of those bodies, with plans for their more complete organization. The Permanent Committee on Christian Endeavor returned the offerings of the societies to missions as amounting to \$4,322. The Committee on Systematic Benevolence represented the interest in the subject to be increasing, their correspondence having quadrupled during the year, and submitted a scheme of measures for the further extension of the principle. The Historical Society had endeavored to interest the presbyteries and synods in its enterprise, had adopted a constitution and by-laws, and had fitted up suitable quarters for its collections. A memorial asking that the Rev. Dr. R. V. Foster be removed from his position as professor in the Theological Seminary was denied, Dr. Foster having appeared before the committee of the Assembly and affirmed his adherence to the Confession of Faith. An amendment to the constitution of the Church permitting the election of elders or deacons for a limited time when any church may so desire was adopted for submission to the presbyteries. A plan was adopted for a "centennial endowment" of the educational institutions of the Church, the total sum aimed at being \$1,000,000. The Assembly, adhering to a former decision that installation is essential to the pastoral relation, directed that ministers not installed be hereafter entered upon the minutes as "minister in charge." It also ordered that a ministerial letter shall not be accepted as valid after the lapse of one year, and that after two years from the date of such invalid letter the holder shall be regarded as having demitted the ministry. Constitutional amendments submitted by the previous General Assembly providing for special meetings of synods and of the General Assembly were found not to have been adopted. In the case of the enrollment of the name of Mrs. L. M. Woosley as an ordained minister, the action of the Kentucky Synod directing the withdrawal of the name was affirmed. The report on Sabbath observance mentioned an improvement in the mind of the Church on the subject, and specified an increase in spiritual life rather than legislation as the means by which reform is to be brought about. The report on temperance condemned the license system, and urged voters to antagonize everything identified with the liquor interest.

Memorial of the Earliest Presbyterian Meeting in the United States.—A historical monument was inaugurated June 14, at Free Hill, Wickatunk station, near Freehold, Monmouth County, New Jersey, on the site of the Old Scots' meetinghouse, where the first presbytery of which any minutes exist was held, Dec. 29, 1706. A large assembly was present, in which the Northern and Southern Presbyterian Churches were officially represented. The Rev. Dr. A. N. Hullifield, moderator of the Synod of New Jersey, presided; the monument was described by the Rev. Allen Boyd, and other addresses were made.

VI. Presbyterian Church in Canada.—The statistical reports made to the General Assembly of this Church in June accounted for 2,942 pastoral charges, with 113,141 families connected with the churches and mission stations, 210,776

members, 10,118 of whom had been received during the year on profession of faith, 160,105 attendants upon Sabbath schools, showing an increase of 1,608, and 11,646 baptisms during the year. The total revenue of the Church amounted to \$2,384,897, an increase of \$114,241. The membership of the Young People's Societies had diminished by 3,765. A credit balance was returned in favor of every fund of the Church. The reports of Queen's, Halifax, Montreal, Knox, and Manitoba Colleges showed increase in almost every department, except in attendance of first-year students, where a decrease appeared. Morrill College, Quebec, had practically suspended operations, and the Board of Governors was considering what disposition should be made of the endowment fund.

The General Assembly met at Halifax, Nova Scotia, June 13. The Rev. Allan Pollok, principal of Halifax College, was chosen moderator. The financial report represented that, notwithstanding the unusually numerous special appeals, the contributions of the year had been greater than those of any year in the past, the investments yielded an average of more than 5 per cent. interest, while the expense of administration was less than 3½ per cent. Seven hundred and sixty thousand dollars had been subscribed toward the contemplated Century fund of \$1,000,000, and the information obtained from the answers to circulars sent out to congregations asking for estimates of the amounts they would probably raise indicated that the subscriptions would exceed the latter sum. The agent of the Ministers' and Widows' fund in connection with the Church of Scotland—a fund that had been left to be a subject of special account when the union of the churches constituting the Presbyterian Church of Canada was consummated—announced that the fund would in a short time be wound up, having fulfilled its purpose, when the capital of nearly \$100,000 would accrue to the general fund of the Church. The results of a conference between representatives of the Anglican and Presbyterian communions held in Toronto respecting the extension of biblical instruction in the schools having been made known to the Assembly, a resolution was passed that the Church should aim at securing the use of the Bible in the courses of all departments and grades of instruction. The proposed new Manual of Aids to Social Worship was subjected to criticism, and objections on account of features which were regarded as ritualistic, and was returned to the committee to report to the next General Assembly in a modified form. A proposition to take such steps as would secure ministers qualified to speak the languages of the Doukhobors, Galicians, and other settlers in the northwest who do not speak English was not favored in the Assembly. An overture asking for the establishment of a term service in the eldership was likewise rejected. These two measures were desired by churches in the western provinces to meet conditions temporarily prevailing there.

VII. Presbyterian Church in England.—The statistical returns of this Church, as reported to the Synod of 1900, give it 318 congregations, 74,541 members, 7,595 teachers, and 82,488 pupils in Sunday schools, and 8,929 members of young men's societies.

The income for foreign missions in 1899 amounted to £29,141, against £28,018 in 1898. Nineteen European ordained missionaries were employed, mostly in China, with 12 medical missionaries, 28 woman missionaries besides missionaries' wives, 28 native pastors supported by

their own congregations, 162 native evangelists and 48 native theological students; and 84 organized congregations, 121 preaching stations with 6,703 communicants, and 12 hospitals were connected with the missions. The income of the society had been £24,002. The Woman's Missionary Association had an income of £3,000 a year, and supported a large staff of woman missionaries in the foreign field. A plan it had in contemplation for the establishment of women's hospitals in China was approved by the Synod.

The Synod met in London, April 30. The Rev. John Watson, of Liverpool, was chosen moderator. The report of the Committee on Religion and Morals spoke of the widespread indifference prevailing in the land, as shown in diminished attendance at places of worship and diminished interest in the work and welfare of the Church. An overture asking the Synod to declare it legal for elders to dispense the Lord's Supper at home mission churches was "passed from," the proposition being regarded as illegal. A proposition to mark the opening of the twentieth century by a special movement for deepening the spiritual life of the Church was approved, and a synodical meeting of ministers and elders for prayer and conference was appointed to be held in Liverpool in October. A proposal to appoint a large commission of Synod to deal with matters which might arise during the intervals between the meetings of the body was referred back. Presbyteries and sessions were advised to co-operate with local councils in the simultaneous missions contemplated by the National Council of the Free Evangelical Churches to mark the opening of the new century. A resolution was passed expressing regret that "through the influence of the authorities of the Anglican Church Presbyterian soldiers in India have been deprived of the use of garrison churches erected in that country at the public expense for the religious worship of the Protestant soldiers, or have been hampered in the use of them by intolerable restrictions," and urging the Government to take steps to remedy the injustice complained of. It was announced that in view of the use of the designation Presbyterian by some of the Unitarian churches, a committee had decided to issue a brief explanatory and historical tract for use in districts where the confusion of names operated prejudicially to the interest of the Church.

VIII. Church of Scotland.—The statistical returns of this Church for 1899 give it 1846 churches and mission stations, with about 2,000 ministers, 648,476 communicants, and in 2,200 Sunday schools 20,834 teachers and 227,452 pupils.

Seven new churches, 3 halls, 2 manses, and 2 mission houses had been added to the property of the Church through the operations of the Highlands and Islands Commission. The amount available for distribution by the Association for Augmenting Smaller Livings was £9,916, or £1,366 more than in 1899. The capital fund had reached £85,956. The Jewish mission reported that of 2,188 children attending its schools, 1,402 were Jews. Eight thousand pounds sterling had been raised for the Jubilee Thank Offering fund, for which it was sought to raise £14,000. The Endowment Committee reported that 408 churches had been endowed since the institution of the scheme.

The combined income of the funds for foreign missions amounted to £50,691. One hundred and fifteen foreign agents were employed in the mission fields, from which were returned 9,891 baptized converts. 12,584 pupils in schools, and 1,063 under instruction in zenanas.

The General Assembly met in Edinburgh, May

24. The Rev. Norman MacLeod was chosen moderator. The report on education showed that the full number of students allowed by the regulations were enrolled in the training colleges, and that the decline in the number of young men students had ceased. The report of the Probationers' Committee, however, showed no improvement. There were only 108 students in the divinity halls, the number having fallen to that figure from 245 in 1889; and so far only 34 men had applied for license in the present year. The total number of probationers and unattached ministers was 329. The severity of the entrance examinations for the university faculties, the prevalence of materialistic views of life, the disinclination of young men of learning to sign the Confession of Faith, and the existence of a time of religious indifference were alleged by different speakers as causes for this decline. A committee appointed by the previous General Assembly to ascertain if the Church had the power to alter the terms of subscription to its Confession of Faith, reported that in the opinion of various eminent lawyers such a power did not exist. A deed to the possession of Iona Cathedral from the Duke of Argyll, its late owner, was presented to the Assembly, and the formal notification of the gift was marked by the expression of tributes to the memory and virtues of the deceased donor. The report on foreign missions represented that the past year had been one of unusual encouragement. The committee was free from debt. In the matter of a correspondence (mentioned in the Annual Cyclopædia for 1899) with the Indian authorities respecting the use of the churches in India by Presbyterian soldiers, satisfactory assurances had been received from Lord George Hamilton. The closing address of the moderator comprised a survey of the departing century and the outlook for the new one, in the course of which the speaker claimed that the ecclesiastical constitution of the Established Church combined state alliance with spiritual alliance in a manner more perfect than had ever been attained by any other church in Christendom.

IX. Free Church of Scotland.—The number of members of this Church at the end of 1899 was 296,685, showing an increase of 2,401. Of the 1,109 congregations (3 more than in 1899) 1,002 were regular sanctioned charges, the remainder being mission stations. The number of pupils in Sunday schools (215,874) was 4,383 less than in 1899.

The total contributions of the Church for all purposes amounted to £706,546, a decrease of £7,196 as compared with the previous year. The amount was, however, £45,000 in excess of the average of the last five years. The funds for the support of the ministry showed an increase of more than £3,000. The income of the Home Mission and Church Extension Committee was £12,292, an increase of £1,107.

The General Assembly met in Edinburgh, May 24. The Rev. Ross Taylor, D.D., was chosen moderator, and made an address on the influence which had been brought to bear upon religious thought during the nineteenth century, including the theory of evolution and biblical criticism. Holding that one unswerving purpose could be traced through all the processes in Nature, he asked if it was possible to believe that all this was due to force alone apart from intelligence or will. With all that had been accomplished in biblical criticism, he found that the great fact of Christian experience remained untouched. A report on the progress of the Church called attention to the fact that while the membership had increased

during the past four years by upward of 12,000, the number of Sunday-school scholars had fallen off to almost exactly the same extent. The increase during the past year had been 2,401. The articles of union with the United Presbyterian Church were brought up for final action, and were adopted by a vote of 592 against 29 for a motion that the Assembly take no further steps toward union—giving a majority of 563 in favor of union, as compared with 527 in 1899. Previous to this action a protest was offered declaring that the signers, in taking part in the discussion, did not admit the right of the Assembly to deal with union. This was tabled, but a declaration, presented after the vote was taken, setting forth that the signers refrained from further opposition on the understanding that no existing principles were to be renounced, was accepted. The report of the Church and State Committee, including a resolution in favor of religious equality, was carried by a vote of 337 to 96. On the presentation of the address to the Queen exception was taken to the use of the word "unavoidable" in describing the war in South Africa, and it was stricken out.

X. United Presbyterian Church of Scotland.—The statistical reports to the Synod of 1900 represent 594 congregations and 199,089 members, showing gains of 5 congregations and 1,613 members, with 138,193 young people under instruction; an income from congregational sources of £349,446—£6,160 less than in 1898—and total contributions of £392,116.

The Foreign Mission Board returned 115 congregations, with 30,431 members. The missionary staff included 165 fully trained agents, of whom 65 were ordained European missionaries, 17 medical missionaries, 23 ordained native pastors, 15 European evangelists, 45 zenana missionaries, and nearly 1,000 native helpers.

The report of the Committee on Union with the Free Church of Scotland, including the basis that had been accepted by the joint committees, was presented, with a verbal explanation that the standards accepted by both churches formed the basis of union, and that there was nothing in the arrangements made that impaired the rights of either church. The report was then adopted, after a brief discussion, by a rising vote. It was agreed that the Synod should meet again, Oct. 30, finally to dispose of the matter of union, the moderator being empowered to call a meeting previous to that time if it should be necessary. The Synod decided to continue the negotiations for the union of its presbytery in Ireland with the Irish Presbyterian Church. A resolution was passed in support of the disestablishment and disendowment of the state Church.

Union of the Free and the United Presbyterian Churches.—The General Assembly of the Free Church and the Synod of the United Presbyterian Church met in Edinburgh, Oct. 30, in special sessions for the purpose of completing the arrangements for union and consummating the act. A final report was made in the Free Church Assembly that 75 home presbyteries had voted in favor of union and 4 against it. A protest was then presented against the act, signed by 500 elders connected with 150 congregations which formed units in 42 presbyteries; but the right of these protestants to be regarded as representatives of the congregations to which they belonged was not recognized. Some amendments proposed to the uniting act having been voted down, the act itself was adopted by a vote of 643 in favor to 27 against it. In the United Presbyterian Synod all but 4 of the sessions were reported to

have responded in favor of the union, and the act was unanimously adopted. On the next day, Oct. 31, the two bodies met in their separate halls and marched thence to the Royal Institution, whence they went in a single procession, including 3,000 ministers, to Waverley Market, where the first meeting of the United Free Church of Scotland was held. The uniting act was adopted by a rising vote of the whole Assembly, and both moderators clasped hands in token of the consummation of the union. The Rev. Dr. Robert Rainy, principal of New College, Edinburgh, of the Free Church, was unanimously chosen moderator of the body, and made an address appropriate to the occasion. The members of the Free Church Assembly who opposed the final adoption of the uniting act held a separate meeting, at which they asserted a claim to be the rightful representatives of the Free Church.

XI. Reformed Presbyterian Church.—At the annual meeting of the Synod, held in Glasgow in May, the Rev. John McKee was chosen moderator. The reports on the schemes of the Church showed balances of £564 in favor of foreign missions, £40 of ministerial aid, £66 of the Synod fund, £157 of the Aged Ministers' fund, £105 of home missions, and £407 of the general fund. A balance was also returned in favor of the publication enterprise.

XII. Original Secession Church.—The annual Synod of this body was held in Glasgow, Scotland, in June. Prof. James Spence was chosen moderator. The financial secretary reported that the total sum of £5,353 lay to the credit of the various funds. A member of the Synod took exception to the policy of keeping so large a sum in hand, and advocated a generous and judicious expenditure on Christian work. The moderator, referring in his address to the subject of union, said that the century could not have been more grandly closed than by the union of two churches which had so much in common as the Free and United Presbyterian Churches, and regretted that all the Presbyterian churches had not been included in the scheme of union.

XIII. United Original Secession Church.—The Synod was petitioned to make some relaxation in the formula of questions used at the examination of ruling elders, in which an indorsement of the action of the fathers, and especially an acceptance of the descending obligation of the covenants taken during the history of the Church, are required. It refused to grant the petition.

XIV. Presbyterian Church in Ireland.—The General Assembly of this Church met in Dublin, June 4. The Rev. J. M. Hamilton, of Dromore, was chosen moderator. The financial reports showed as to the advance made by the Church during the past ten years, that the number of families had increased by 393, of communicants by 3,746, of pupils in Sabbath schools by 3,088, and the amount of collections for Sabbath school, missionary, and religious and charitable purposes by £12,219. There were now returned 754 ministers, 51 of whom were retired, and 166,630 communicants. The total income for ministerial support, £109,187, gave an average salary of £160 per minister.

XV. Welsh Calvinistic Methodist Church.—The statistics of this Church, presented to the General Assembly in June, give the following total numbers in the several items: Of churches, 1,345; of chapels and preaching stations, 1,557; of Sunday-school buildings, 880; of mansees, 170; of ministers, 820; of deacons, 2,346; of communicants, 156,058; of children, 69,573; total in the churches, including 2,336 probationers, 228,147; with the

hearers included, the aggregate is given as 315,182. Increase is shown in all these items, that of ministers being 28, and that of communicants, 2,346. The total contributions of church members were £284,180, giving an average of £1 16s. 4½d. per member, and an increase of £37,815 over the contributions of 1898. The contributions for foreign missions had been £9,680. The mission in India returned 355 chapels and preaching stations, 28 ministers, 52 preachers, 4,237 communicants (an increase of 641), 3,573 candidates, 6,182 children (a total in the churches of 13,992), 18,587 hearers, and £4,872 of contributions by the native members. The report showed that on the Khama hills in India the natives in the churches were sending out missionaries, and the question of putting the churches on a self-supporting basis had been considered. The native churches had established a home missionary fund, in aid of which they were making a centenary collection. A report was also made of the mission in Brittany. The book room had become a source of financial profit. Nearly £40,000 had been contributed toward the proposed centenary fund of £100,000.

The General Assembly met at Llanberis, Wales, June 19. The Rev. Thomas Roberts, moderator-elect for 1900, having died since his election, the Rev. J. J. Roberts, of Portmadoc, was chosen moderator. A report was presented concerning the work done by the connection among Welshmen in London and the large towns of England and Scotland, and in the United States and Canada. Resolutions were adopted calling attention to the difficulty experienced in obtaining for the soldiers in service the privilege of worshipping in the non-conformist way.

PRINCE EDWARD ISLAND, a province of the Dominion of Canada; area, 2,133 square miles; population in 1891, 100,088.

Government and Politics.—The political year in this little island province of the Dominion was very stormy. It began with the ministry of the Hon. D. Farquharson, a continuation of the Liberal Government of the Hon. F. Peters (which had originally won at the polls, and had been re-organized because Mr. Peters had removed to British Columbia), holding office by a majority of two. The other members of his ministry were Hon. Angus McMillan, Provincial Treasurer; Hon. James R. McLean, Commissioner of Public Works; Hon. D. A. MacKinnon, Attorney-General; and Messrs. J. W. Richards, Benjamin Rogers, A. McLaughlin, Peter Sinclair, and Peter McNutt without office or portfolio. Mr. MacKinnon, against all British and Canadian constitutional precedents, had held his office of Attorney-General, and continued to do so during the session, without a seat in the Assembly. He had been defeated in December, 1899, on appointment to that office, by A. P. Prowse, while another Conservative in a similar by-election had also won a seat. On May 8 the Legislature was opened in due form by Lieut.-Gov. P. A. MacIntyre, and it was adjourned on June 9 after a session in which the legislation attempted or effected was slight and the dominant feature was party contention. Of the majority of two possessed by the Government, one was Mr. Peters, who had not yet resigned his seat, though living 3,000 miles away. The other was lost by Mr. Wise, who had been originally elected as a Liberal, repudiating the Farquharson Government and resigning his seat before the Assembly met, with a view to having his position approved by his constituency. He declared that his resignation was handed to the Speaker on a distinct understanding with the Government that the

election would be held at once. Even without such an understanding, however, the unwritten constitution and permanent practice is to hold such an election within a short time. But the Government received the resignation, refused to hold the election during the session of the Assembly, and for a time held office by the casting vote of the Speaker. Finally it obtained the support of a Conservative member named Pineau. An exciting matter was an attempt by Mr. Wise to withdraw a resignation which he said had been given under false pretences on the part of the Government, and to take his seat. Had he done so, the Government would have been beaten. They therefore expelled him from the House on the casting vote of the Speaker. In July, 1900, Mr. Wise was defeated by a large majority.

Finances.—The receipts of the province for the year ending June 30, 1899, were \$282,678, and its expenses \$276,789. The former amount included the Dominion subsidy of \$181,932, the provincial land tax of \$30,136, and the sale of debentures for \$17,089. The expenditures included \$125,531 for education, \$20,108 for the insane asylum, \$19,076 for interest on the debt, \$15,874 as subsidies to ferries and steamers, \$32,583 on roads and bridges, and \$15,317 on the administration of justice. The gross debt of the island was given in 1899 as \$500,000.

Prohibition.—The only legislative measure of importance marking the year was a prohibition bill similar in many respects to that of Manitoba. It was introduced by Premier Farquharson as a Government measure, and, after some criticism, was finally approved by the Opposition and carried. It prohibits the retail sale of liquor except for sacramental, medical, scientific, or mechanical purposes, under rigid restrictions. Wholesale trade is also prohibited except to physicians and druggists, and for consumption outside the province. It will go into effect on June 5, 1901. The penalties for unlawful sale are \$100 or three months in jail for first offense; \$200 or four months in jail for second offense; six months in jail, without the option of a fine, for the third and subsequent offenses. Provision is made for appointment of inspectors to enforce the act, and for one or more vendors for the city of Charlottetown and for each county electing to come under the influence of the act. The fines are to go into the provincial treasury excepting those collected in Charlottetown, one third of which will go into the city. No appeal is possible from any conviction or judgment rendered in the ordinary courts. Where the prosecutor is other than one of the inspectors provided by the act, such prosecutor is to receive one fourth of the fines collected.

Agriculture.—In 1898 there were 44,703 acres in wheat, with a product of 596,761 bushels; 7,594 acres in barley, with 147,880 bushels; 123,924 acres in oats, with 2,922,522 bushels; 43,521 acres in potatoes, with 7,071,308 bushels; 4,411 acres in turnips, with 2,005,453 bushels. There were also 84,460 bushels of buckwheat and an estimated product of 150,000 tons of hay. The live stock in the island in 1898 included 44,000 horses, 110,000 cattle, 176,800 sheep, and 51,000 swine.

Education.—The number of schools in 1899 was 582; teachers, 582; enrolled pupils, 21,550; average attendance, 12,941. The Government expenditure was \$125,531, and the school board (local) expenditure \$31,537.

Prince Edward Island Railway.—This chief factor in provincial transportation runs the whole length of the island, 154½ miles, and has a total mileage of 211. Its earnings in 1899 were \$165,012, its working expenses \$218,053, its deficit

\$53,041, its freight 57,968 tons, and its passengers 129,667 in number. The line is under the control of the Dominion Government.

Fisheries and Shipping.—The yield of the fisheries in 1898 was valued at \$1,070,206—a slight increase over the preceding year—and included a product of mackerel, \$36,564; herring, \$182,214; cod, \$101,488; lobsters, \$468,374; hake, \$43,246; smelts, \$32,424; oysters, \$105,936. The Dominion bounty received by the fishermen was \$10,188; the number of vessels was 24, with 125 men; the number of boats was 1,121, with 2,199 men. There were 230 lobster canneries, employing 3,120 men and having a plant valued at \$267,712. The fish exported were valued at \$541,585. The tonnage of seagoing vessels carrying cargoes to and from the island was 118,187.

PROTESTANT EPISCOPAL CHURCH IN THE UNITED STATES. A summary of the statistics of Church progress in the year shows the following: The number of dioceses in the United States is 59; missionary jurisdictions in the United States, 17; missionary jurisdictions in foreign lands, 8; clergy (bishops, 84; priests and deacons, 4,863), 4,947; parishes and missions, 6,677; candidates for holy orders, 506; ordinations—deacons, 157; priests, 156; baptisms, 60,052; confirmations, 43,419; communicants, 714,575; marriages, 19,854; burials, 35,300; Sunday-school teachers, 46,222; Sunday-school pupils, 430,901; total of contributions, \$16,102,467.52.

The gross receipts for missions for the fiscal year that ended Aug. 31 were \$1,004,349.69, being by far the greatest amount ever reported. The contributions for the work for which the board made itself responsible by appropriation were \$439,824.33; the amount received from legacies designated by the testators, either for domestic or foreign missions or for the use of the society, was \$255,104.59, of which sum \$186,734.59 was applied upon the liabilities of the society to Sept. 1, 1900, and \$50,000 was permanently invested. The number of parishes and missions contributing—217 more than the year before, and more than in any previous year—was 3,963, and the amount of church offerings was larger by \$51,731.98 than last year. The Lenten offering from Sunday schools, amounting to \$97,000.89, was the largest yet made, and was an increase of \$9,618.66 over last year's offering. The number of schools contributing was 3,338, a gain of 220 as compared with the previous year. Seven of the foreign mission schools gave a total of \$178.81—an average of \$25.54—a showing worthy to be compared with the \$28.06 representing the average gift from the Sunday schools in the United States.

The receipts for domestic missions (including a balance from 1899 of \$81,306.45) were \$544,312.91. The payments on account of white, Indian, and colored mission work amounted to \$275,247.04; specials were \$77,028.33; portion of Woman's Auxiliary united offering of 1898 applied to appropriations for domestic missions, \$9,084.76; legacy expenses (one half), \$103.75; one half amount paid to annuitants, \$926; one half cost of administration and collection, \$19,133.93; half cost of printing reports of the board, Spirit of Missions for the clergy, pamphlets and leaflets for gratuitous distribution, \$9,889.86; legacies paid to certain bishops at their discretion, \$2,500; returned to Standing Committee on Trust Funds, \$53,000; making the total payments for domestic missions \$446,925.57; and leaving for domestic missions and specials at the close of the fiscal year a balance of \$97,387.34. The salaries of the bishops and the stipends of the missionaries in 17 missionary jurisdictions were

paid, and in addition assistance was given to 40 dioceses and in Porto Rico. The general missionary to the Swedes and 2 missionaries among deaf-mutes in the West and South also were supported. The whole number of missionaries in the domestic field during the year, clerical and lay, male and female, receiving salaries or stipends, was 1,115, and the amount appropriated to the whole work (including the sums not directly chargeable to the dioceses) was \$316,861.17. The number of parishes and missions contributing for domestic missions was 3,728, 137 more than ever before.

The receipts for foreign missions (including a balance of \$64,101.21 for foreign missions and specials from 1899) were \$470,279.23. The payments on account of mission work amounted to \$227,552.96; specials were \$47,029.30; portion of Woman's Auxiliary united offering of 1898 applied to appropriations for foreign missions, \$5,000.53; legacy expenses (one half), \$103.75; one half amount paid to annuitants, \$926; one half cost of administration and collection, \$19,135.93; half cost of printing reports of the board, Spirit of Missions for the clergy, pamphlets and leaflets for gratuitous distribution, \$9,889.86; legacies for investment paid to standing committee, \$4,000; legacies paid to certain bishops at their discretion, \$2,500; to Mexico, \$950; returned to Standing Committee on Trust Funds, \$66,189.48; making the total payments on account of foreign missions \$383,277.81, and leaving for foreign missions and specials at the close of the fiscal year a balance of \$87,001.42.

The reports of the missionary bishops are encouraging. Though retarded by obstacles, substantial progress has been made everywhere. With the means at their disposal the bishops are reaching out as far as it is possible to go, and the outlook is more hopeful than ever; but all express the need of means to extend their work.

The statistics of work among the colored people in the 24 dioceses in which such work is done show that during the year the baptisms numbered 1,070, and the confirmations 712; there were 5,426 pupils in the day schools, 8,332 in the Sunday schools, and 1,476 in the industrial schools, the earnings of which amount to several thousand dollars annually; the contributions amounted to \$46,737.57, and the number of communicants was 7,865. There are about 80 colored clergymen laboring in the South, and more than 60 white clergymen. The appropriations for the work to Sept. 1 amounted to \$61,520.

Church work in Porto Rico has been carried on by 2 missionaries—the Rev. George B. Pratt, at San Juan, and the Rev. Frederick Caunt, at Ponce—the latter of whom was appointed this year. They have had constant help from Chaplain Brown, U. S. A., formerly a missionary in the domestic field. Porto Rico was placed in the charge of the Bishop of Chicago, and he having resigned, it is now under the care of the Bishop of Sacramento, and has been visited by the Bishop of Minnesota, who confirmed 12 persons.

In the Philippines one appointment has been made, that of the Rev. James L. Smiley. He has the co-operation of workers sent out by the Brotherhood of St. Andrew, of which there are 8 chapters, composed entirely of soldiers working among their fellows, and of Chaplain Pierce, U. S. A., who has raised more than \$20,000 toward establishing the work. Church work in the Philippines has been placed in the charge of the Bishop of Shanghai, who has visited the field.

The reports of work among the Swedes show

that 3,586 public services were held in the year, and nearly \$28,000 contributed; more than 1,000 persons were baptized, and nearly 300 confirmed, and the communicants number more than 8,000.

For mission work among the Indians \$54,158.89 was paid out by the board.

In Liberia 4 priests—young men of African descent, educated in the mission schools—were ordained, 5 postulants and 2 candidates for holy orders were admitted, 13 lay readers were licensed, and 3 additional catechists and teachers were commissioned; the corner stones of 1 school and of 2 church buildings were laid; 2 churches were consecrated; 329 persons, many of whom were adults, were baptized, and 184 confirmed; the contributions were \$2,538.24; and the number of communicants was 1,647, of whom 975 were aborigines.

Spiritual progress, and material as well, marked the course of the year in China until the outbreak of the disturbances there, after which time all missionaries and native workers were withdrawn from the mission stations. One native deacon was advanced to the priesthood, and 1, a graduate of the theological school, was admitted to the order of deacon; 3 of the foreign clergy also were advanced to the priesthood. The baptisms of natives were 411; confirmations, 151; communicants, 1,139; day-school pupils, 778; boarding-school pupils, 448 (all these pupils have lessons equivalent to Sunday-school work in the United States); contributions, \$2,799.02 (Mexican dollars). Science Hall, St. John's College, was completed and formally opened; the college chapel was inclosed and made the pro-cathedral; St. Hilda's school, at Wu-Chang, was erected and opened for the work of female education; and at several stations land was bought for chapels and schoolhouses. The translation of the Bible was continued, an abridgment of the Old Testament published, a translation of Gwynne's Catechism made, and the hymnal was revised and enlarged by the translation of additional hymns.

In Japan the most noteworthy event of the year was the consecration of the Rev. Sidney Catlin Partridge as Missionary Bishop of Kioto, the missionary district set apart in 1898. Statistics for the Japan mission give: Natives baptized, 260, of whom 173 were adults; confirmed, 207; communicants, 1,757; day-school pupils, 1,561; boarding-school pupils, 318; Sunday-school pupils, 1,852; contributions, \$7,518.02 (Mexican dollars). Three native priests and 2 deacons were ordained in Japan, and the missionary staff was strengthened by the arrival of 4 missionaries. Three churches were consecrated, and land for mission buildings was bought. It has been made clear that the intention of the rescript issued in 1899, which forbade any religious instruction in any schools in Japan licensed by the Department of Education, was to forbid religious instruction as part of the curriculum established by the department, but that there was no intention of interfering with such instruction if given either before or after the hours prescribed for the regular curriculum. A bill for the regulation of religions, aiming to bring all institutions, secular and religious, under the control of the Government, was introduced in the last Diet, but because of the opposition of the principal Buddhist sects it failed to receive a majority vote. Many of the provisions of this bill are calculated to hinder Christian work.

The baptisms in Hayti during the year numbered 141, the confirmations 31, and the contributions were \$2,388.77. At Léogane, the stronghold of Voodooism, a chapel was conse-

crated, and the chief Voodoo priest, or sorcerer, has become a convert. The bishop asserts that the time now is fully come to put into effective movement the auxiliary means of evangelization for which preparation has been made during the past twenty years—medical missions and industrial schools.

The routine work of the Mexican Church continues to be carried on by 7 presbyters and 5 deacons, who, with lay readers, make up the working force. The baptisms in the year were 83, and the confirmations 49; the offerings amounted to \$1,062; and the number of communicants was 727. The work in Mexico among English-speaking people has not been as successful as was anticipated.

The statistics of the chaplaincies in Europe show: Clergy, 14; organized chaplaincies, 9; baptisms, 5; confirmations, 40; communicants, 1,400; contributions, \$15,025.

On March 14, 1899, the Assyrian Mission Committee, which was organized in February, 1895, was made an auxiliary to the Domestic and Foreign Missionary Society. The amounts collected for this mission since March, 1899, aggregating \$2,603.69, have been applied to their respective purposes.

The receipts of the American Church Missionary Society amounted to \$68,353; the cash on hand Sept. 1, 1899, was \$45,685.17; the expenditures were \$103,955.52. The cash balance Sept. 1, 1900—\$10,282.65—with the special investments of \$26,362.50, gives \$36,645.15 as the real amount of available funds on hand for the society's general work and the beneficiaries of its trusts. Of this amount there is available and unappropriated for the general work \$3,162.20. The missionaries of the society in the domestic field number 20, who minister in 66 stations to 1,300 communicants, of whom 95 have been added during the year. The disbursements for Brazil for missions were \$14,115.55; for "specials," \$2,200.43; for church building, \$7,000. The Brazilian mission continues to develop, and from all established points of Church work there has come pronounced expression of acceptable result. During the year a theological school has been opened, and a new mission has been instituted; 101 persons were baptized; 147 confirmed; the communicants were 443; Sunday-school teachers, 27; pupils, 378; and contributions, \$4,991.32.

For Cuba the disbursements were: For missions, \$4,874.71; for "specials," \$1,670; for Matanzas Orphanage, \$3,337.07; for Havana Orphanage, \$482.70; for Guantanamo Orphanage, \$22; for church building in Bolondron, \$1,028.26; for church building in Havana, \$2,434.23; for Matanzas Cemetery certificate, \$500. In spite of the difficulties and small means good work has been done in Cuba. Four presbyters labor there, and a candidate for holy orders; these are assisted by 2 laymen and 5 or 6 ladies. The Bishop of Pennsylvania made a visitation to the island and confirmed 118 persons.

The Society for Promoting Christianity among the Jews continues, though slowly, to make converts; it is hampered by lack of means. The amount at its disposal during the year was \$6,268.88, the expenditures were \$5,827.41, and a cash balance of \$441.47 remains in the treasury.

The summary of work accomplished in the year by the Woman's Auxiliary and its junior department, in which 3,408 parishes and missions took part, shows: Contributions in money, \$210,841.50; and boxes valued at \$191,434.96. Of the total of \$402,276.51 the junior department gave money and boxes to the amount of \$31,148.23.

The American Church Building Fund Commission reports that in the year gifts amounting to \$4,725 were made to 27 churches, and loans to the amount of \$19,575 to 13 churches. The contributions to the permanent building fund were \$6,930.86; interest on loans and investments, \$16,603.02; loans returned by parishes and missions, \$33,008.90. The fund now amounts to \$356,158.01.

In Honolulu no transfer of the rights of the Independent Church there has yet been effected by the ecclesiastical authorities. The statistics of the diocese for 1900 show: Number of clergy, 8; church edifices, 7; parishes and missions, 9; baptisms, 119; confirmations, 75; communicants, 590; Sunday-school teachers, 22; Sunday-school pupils, 270; parish-school teachers, 15; parish-school pupils, 435; contributions, \$8,095.

The Right Rev. Mahlon Norris Gilbert, Bishop Coadjutor of the diocese of Minnesota, died March 2, 1900. The Right Rev. Henry Melville Jackson, bishop, whose resignation was accepted April 19, 1900, died May 4, 1900. The Right Rev. Richard Hooker Wilmer, second Bishop of Alabama, died June 14, 1900. Also the Church lost by death 97 other clergymen.

On Feb. 2, 1900, the Rev. Sidney Catlin Partidge, having been elected first bishop of the missionary jurisdiction of Kioto in Japan, was consecrated. Feb. 24, 1900, the Rev. Robert Codman, Jr., rector of St. John's Church, Roxbury, Mass., having been elected on Dec. 13, 1899, at a special convention of the diocese, third Bishop of Maine, was consecrated. On the same date the Rev. Charles Palmerston Anderson, rector of Grace Church, Oak Park, Ill., having been elected, on Jan. 9, 1900, by a special convention of the diocese, Bishop Coadjutor of Chicago, was consecrated. July 25, 1900, the Rev. Robert Woodward Barnwell, rector of St. Paul's Church, Selma, Ala., having been elected Bishop Coadjutor of Alabama, and the Right Rev. Richard Hooker Wilmer, bishop of the diocese, having died subsequently to the election, was consecrated, and became the third Bishop of Alabama. Nov. 8, 1900, the Ven. Reginald Heber Weller, Jr., B. D., Archdeacon of Stevens Point and rector of the Church of the Intercession, Stevens Point, having been elected, on Aug. 30, 1900, at a special convention of the diocese, Bishop Coadjutor of Fond du Lac, was consecrated.



QUEBEC, a province of the Dominion of Canada; area, 228,900 square miles; population in 1891, 1,488,535.

Government and Politics.—The Government of Mr. F. G. Marchand faced the opening of a new year with a substantial majority and no serious shadow upon its future. The Legislature met on Jan. 18, 1900, and was opened by Lieut.-Gov. L. A. Jetté with a speech from the throne, in which he said:

"You will be called upon to consolidate our health and license laws, and amendments to the laws governing Crown lands, factories, and mining corporations will also be laid before you.

"As you will see by the public accounts, equilibrium is at last restored in our finances, and the ordinary receipts of the year show a surplus over all expenditure. With the kind assistance hitherto afforded my Government by the members, I am confident that this condition of affairs will continue; but to maintain this position it will be necessary to keep the expenditure within its present limits for some time. The settlement of accounts between the Government of the Dominion and that of the provinces of Ontario and Quebec has made marked progress during the year. Our province has obtained from the board of arbitrators an important award condemning Ontario to pay into the common-school fund an amount of nearly \$300,000. The Ontario Government has, however, notified my Government that it intends to apply to the Supreme Court for leave to appeal from that award. The question of the perpetual annuities to the Lake Huron and Lake Superior Indians, under the Robinson treaties, presented considerable difficulties which, by means of an agreement with the two other governments interested, my Government has been able finally to settle to its undoubted advantage.

"My Government has neglected none of the undertakings which it has pledged itself to promote. The education of youth has been the object of its particular care. It has increased the yearly grants to poor municipalities and to night schools; it has subsidized a normal school for female teachers which has just been founded in Montreal. The providing of free schoolbooks for primary schools

continues to receive its attention, and the system will shortly be inaugurated by the distribution of an excellent map of our province to all the schools in municipalities desirous of benefiting by the same. The school inspectors have given pedagogical lectures in their several districts, which were attended by a great many teachers, at the Government's expense; and in order to encourage them in the performance of their scantily remunerated task my Government has distributed money bonuses to the most deserving.

"To encourage colonization, my Government has made considerable efforts to open new roads in regions suitable for settlement, and many settlers have taken advantage of this to establish themselves there. Agriculture has also received a liberal share of encouragement from my Government, which has paid attention to improving the quality of butter and cheese, to propagating the best kinds of fruit trees, and to providing municipalities with better highways.

"In consequence of a judgment of the Privy Council, which was communicated last year to the Legislature, my Government has become vested with the ownership of a portion of the fisheries formerly under the administration of the Federal Government. The judicious application of the law passed on the subject last session, and of the game law, together with the part taken by the province in the New York Sportsman's Exhibition in 1899, have resulted in a marked increase in the provincial revenue.

"My Government has devoted its particular attention to protecting and profitably utilizing our immense forests, our splendid water powers and mineral resources. Thanks to its assistance, new industries continue to be established and populous manufacturing centers are springing up in regions until recently uninhabited. Within the past few years pulp wood has assumed such importance in connection with the prosperity of our population and the public revenue that my Government has deemed it advisable to take steps to increase the manufacture of pulp in this country, to the benefit of our industrial and laboring population."

One of the pledges made by the Government, when in opposition was a promise to abolish the

official residence (Spencer Wood) at Quebec of the Lieutenant Governor. Since attaining office they had done nothing in this direction, and during the current session they came in for much criticism—not because they should have abolished the residence, but because they had promised to do so and not tried. Messrs. Le Blanc and Nantel and other Conservative leaders declared themselves in favor of its maintenance, but they could obtain no definite expression from members of the Government. On March 10 Mr. Marchand introduced a measure proposing to abolish the upper house of the Legislature. His resolution merely stated that "in the opinion of this house, it is desirable that the composition of the Legislature of this province be modified by the abolition of the Legislative Council." He referred to various attempts made in previous years to effect this end by both himself and the late Mr. Mercier. He declared that the Council cost about \$40,000 a year, which might be better expended on colonization; that Ontario and Manitoba got on very well without such a body, and so could Quebec; that it did not represent aristocracy and landed wealth, as did the House of Lords in England; that its members were mainly political partisans; that the Assembly did not need such a correcting and modifying influence; and that the people were in favor of its abolition. Mr. E. J. Flynn, leader of the Conservative opposition, declared, in reply, that the Government were insincere in the matter, or else they would have introduced a specific measure instead of an academic expression of opinion; that the Council was an essential part of the Constitution constructed at confederation; that the English minority in the province was almost unanimously in favor of its maintenance; that it was the safety valve of our system of Government, and represented the sober second thought of the people; that in the past it had defended important interests, and was regarded by the city of Montreal as the safeguard of its manufactures, capitalists, and property rights; that it represented the Quebec aristocracy of merit and intelligence in professional, industrial, and agricultural life; and that it had checked legislation subversive of public order and the Constitution. He moved an amendment as follows:

"That this house is satisfied with the present Constitution of this province, which is based on that of Great Britain, and does not desire any such innovation as that proposed, which would have but one result—that of imperilling our provincial institutions and very seriously affecting the interests of this province as an integral part of the Canadian confederation."

The original motion was carried by a party vote—38 to 21. In the Council itself a more formal bill was introduced and debated at length, the principal speeches being made by the Hon. Messrs. Archambault and T. Chapais. Eventually an amendment moved by the Hon. C. B. de Boucherville, a former Conservative Premier of the province, declaring that the Council should be maintained "in the interest of wise legislation and as a safeguard for precious privileges" accorded by the confederation act, was carried and the bill was defeated. On March 23 the Legislature adjourned after the Lieutenant Governor had assented to a large number of measures, among which were the following:

To authorize guarantee companies to become sureties before the courts.

Respecting mining companies.

To amend the mining law.

To amend the law respecting the sale and management of Crown lands.

To consolidate and amend the license law.

To amend the law respecting industrial establishments.

Respecting the construction of telephone lines.

To amend the law respecting taxes upon commercial corporations and companies.

To incorporate the Montreal Mining Exchange.

To incorporate the Great Northern Elevator Company.

To amend the law respecting admission to practice medicine.

To incorporate the Labrador Electric and Pulp Company.

Concerning the Board of Catholic School Commissioners of Montreal.

During the year important changes took place in the *personnel* of the Government. On Feb. 13 the Hon. Joseph Shehyn retired from his office of minister without portfolio in order to accept a Dominion senatorship. Late in September the Hon. F. G. Marchand, who had been an honorable and much respected Premier, died, and on Oct. 3 a new Liberal ministry was sworn in under the premiership of Hon. S. N. Parent—a comparatively young man who had been Commissioner of Lands, Forests, and Fisheries in Mr. Marchand's ministry and Mayor of Quebec city several years. Mr. Parent retained his old portfolio in the Government, and Mr. Shehyn resumed his office. The Hon. H. Archambault as Attorney-General, the Hon. F. G. M. Dechene as Commissioner of Agriculture, the Hon. G. W. Stephens as member without portfolio, the Hon. A. Turgeon as Commissioner of Colonization and Mines (with the addition of the provincial secretaryship), and the Hon. J. J. Guerin, member without portfolio, retained their posts. Mr. Lomer Gouin came in as Commissioner of Public Works in place of Mr. H. T. Duffy, who took the treasuryship, and the Hon. J. E. Robidoux retired and was appointed to a provincial judgeship.

Finances.—On Jan. 25, 1900, Mr. Marchand presented his annual budget as Provincial Treasurer. His estimated expenditure for the year ending June 30, 1901, was \$4,780,652, an increase of \$200,000 over the preceding year's estimates. He declared that on June 30, 1899, the total liabilities, including the funded debt and its increase by the conversion, the temporary loans, trust and railway deposits, outstanding warrants, increased railway subsidies, etc., amounted to a total of \$37,320,504, and the total assets to \$10,654,642, leaving on that date an excess of \$26,625,562 of liabilities. Compared with the previous year's statement, the increase of the excess of liabilities was \$795,038, while the increase of the capital of the funded debt conversion was \$915,280, so that actually there had been a decrease of \$120,241 in the excess of liabilities, apart from the increase by conversion of the debt.

On June 30, 1898, the funded debt outstanding amounted to \$34,238,841, and on June 30, 1899, to \$35,128,847, an increase of \$845,006 also due to the conversion. There was invested during the year for the sinking fund \$21,070, bringing that fund up to \$10,025,747 and leaving the net amount of the funded debt \$25,103,099. On June 30, 1899, the floating debt, made up of temporary loans, trust deposits, railway guarantee deposits, outstanding warrants, unearned railway subsidies, amounted to \$1,991,656, against which the Government held \$201,970 cash in banks and \$267,224 claims for loans and advances to individuals and corporations, leaving the balance of the floating debt at \$1,522,462, and constituting a decrease of \$18,807. The total amount of the debt converted was \$3,961,743, which added \$915,280 to the princi-

pal of the debt. In all, the total amount converted to that date was \$7,333,297, increasing by \$1,715,427 the principal of the debt. But the annual saving in the interest until the original bonds begin to mature amounted to \$34,202. Against this, however, must be put the commutation of the stamp duties on the \$9,048,725, amounting to \$56,653. The Treasurer further said that the contract executed between his predecessor and the Bank of Montreal for the conversion of the debt, which was entered into in April, 1897, expired on May 1, 1899. An arrangement was concluded, under authority of an order in Council of June 30, 1899, with the bank, to take charge of the conversion for the province at a commission of one half of one per cent. on the nominal value of bonds converted, the province to pay all expenses and brokerages, which would probably be about three eighths of one per cent. The price for the 3-per-cent. inscribed stock was advanced from 90 to 95 per cent., but owing to the depression that had taken place in the money market there had been no transactions so far, and the Government would wait more favorable opportunities to authorize any further conversion. On March 15 the following Opposition motion was presented to the house, but was defeated by 36 to 18 votes:

"That this house, while ready to vote the supplies to her Majesty, regrets to see that the party now in power has altogether failed to keep the solemn engagements made by it when in opposition, especially as regards the ordinary expenses of carrying on the Government. In fact, according to page 212 of the journals of the house, Hon. Mr. Dechene, now Commissioner of Agriculture, in 1896 laid before the house a proposition regretting that the expenses of Government, under Conservative administration from 1893 to 1896 inclusive, were as follow: 1893, \$3,925,258.75; 1894, \$3,876,990.33; 1895, \$4,043,228.43; 1896, \$4,041,221.66, making an average of \$3,973,424.91: and yet, according to public account for the fiscal year ending June 30, 1899, the ordinary expenses under the present Government were \$4,201,023, an increase of \$159,801.55 over 1896, and of \$222,598.30 over the average above given for the four years of Conservative Government from 1893 to 1896 inclusive."

The actual receipts of the province for the year ending June 30, 1900, were \$4,539,736, and included \$1,278,991 from Dominion subsidy; \$1,299,371 from lands, forests, and fisheries; \$247,793 from law stamps, legal fees, etc.; \$580,139 from liquor licenses; \$186,598 from taxes on commercial corporations; \$270,865 from succession duties; \$79,713 from insane institutions; \$300,084 from the Quebec and Ontario Railway. The total actual expenditure was \$4,626,472, showing a small deficit and including such items as expenses of public debt, \$1,538,059; legislation, \$199,563; civil government, \$285,872; administration of justice, \$526,107; education, \$438,758; public works and buildings, \$97,209; agriculture, \$193,759; lands, forests, and fisheries, \$149,704; colonization and mines, \$184,845; lunatic asylums, \$340,400; railway subsidies, \$90,276.

Education.—One of the questions of the year was the cutting off of certain Government grants to the universities and their application to elementary education. Early in February Dr. R. W. Heneker, Chancellor of the University of Bishop's College, Lennoxville, resigned the chairmanship of the Protestant Committee of the Council of Public Instruction. In explaining his reasons he referred to the marriage-license fees of Protestants in the province, which for thirty years had been allowed to go toward the support of the two universities—

McGill and Bishop's College—as a sort of Government grant, and spoke of the strong protests of the committee as well as of the universities against the legislation in question. Speaking of his retirement, he said: "I have been led to take this course for many reasons, but mainly because I find myself in direct antagonism with the sentiment now prevailing in the Legislature and now upheld by the Government (which represents the people), that no further grants should be made to the universities of McGill and Bishop's College. These, the leading educational institutional for the training of the Protestant youth of the province, must henceforth carry on their high-class work without any assistance from the public purse. All who are acquainted with university work know that the arts course is the foundation course of all learning, and can not without difficulty be maintained with satisfactory results without state aid, and it is in these institutions that the statesman, the professional man, the high-class merchant, and the teacher of high class get a proper preparation for the duties of life."

The Rev. Dr. W. J. Shaw was elected chairman in Dr. Heneker's place, and a motion of censure upon the Government for its policy in this connection was shortly afterward put to the committee and lost.

The provincial branch of the Dominion Prohibition Alliance, on March 1, declared that: "From information given, we are of opinion that the provisions in our school laws and regulations are entirely inadequate to give any effective and scientific temperance instruction in our elementary and high schools. We have reason to believe that it is now entirely ignored in a large proportion of our schools, and very inadequately taught in many of the others."

In the House of Assembly, on March 26, on a motion of Hon. E. J. Flynn and Mr. A. W. Atwater, the following resolution regarding the Government's attitude toward education was presented, but of course was defeated by the party vote:

"That this house finds that in spite of all the self-praises of the Government as regards education, the acts accomplished and for which they take credit were thus accomplished only for the greater part at least in virtue of an act passed under the previous administration, to wit: 60 Victoria, chapter 3, respecting 'elementary schools,' which appropriated the sum of \$30,000 to be applied, under the direction of the Lieutenant Governor in Council, by the Superintendent of Public Instruction in promoting elementary instruction in poor municipalities, aiding schools for benefit of the working classes in cities and towns, improving the condition of elementary and model schools' teachers, supplying schoolbooks gratuitously, and generally providing for the more efficient diffusion of elementary education throughout the province; the whole to such extent as the Lieutenant Governor in Council may be pleased to order, and under such regulations as he may be pleased to make. And even as regards the application made by the Government of the above statute, this house sees with regret that no general rule or regular system of distribution and payment has been followed: in fact, frequently the Government have applied portions of the above grant to purposes which should have been foreseen and specially provided for in the budget or else met by other appropriations. This house also regrets that during the last fiscal year 1898-'99 the Government applied and expended only \$22,729 out of the said \$50,000, thereby depriving elementary schools of the aid to which they were entitled, and particu-

larly poor school-teachers of the bonuses or gratifications which the law authorizes, and which they had the right to expect for the said year, to the amount of \$14,000."

Mr. Marchand, in his budget speech, defended the Government, pointing out that the withdrawal of the marriage-license fees from the universities helped the poor municipalities and weak elementary schools, and that his Government had been unjustly accused of practicing an undue economy by depriving public instruction of its legitimate share of the expenditure. He declared that if the amounts of the special grants of certain educational institutions and to night schools, entered under other headings, were taken into account with the ordinary expenditure for public instruction, it would be found that the present Government had laid out last year upon the cause of education \$412,657, as compared with \$389,759, the amount expended by the Conservatives on it in 1895-'96, the last full year of their *régime*. Not only had the ordinary appropriations for elementary schools, for superior education, and for literary, scientific, and industrial institutions been fully employed, but this present Government had added considerably thereto for the purposes just indicated. In addition, they founded at Montreal a normal school for female teachers, which was actually in full operation. They had also made provision for the free distribution of a geographical map of the province to all the public schools. This map was ready, and its distribution would be effected as soon as it had been approved by the Council of Public Instruction. They were, moreover, preparing to distribute a free series of elementary-school text-books to primary schools.

The Roman Catholic elementary schools in the province, on June 30, 1899, included 4,203 under control of municipalities and 53 independent. The model schools were 347 under municipal control and 140 independent. The academies under the former head numbered 35, and under the latter 96. The independent Catholic normal schools, classical colleges, universities, etc., numbered 26. Of the Protestant schools, 885 of an elementary nature were under municipal control, together with 52

model schools and 29 academies. There were 7 universities, colleges, and normal schools. The Catholic pupils in Roman Catholic schools of all kinds numbered 276,988; the Protestant pupils in Protestant schools numbered 36,808. There were 1,040 students at Laval and 1,320 at McGill and Bishop's College. The expenditure by municipalities upon education in 1899 was \$1,448,695.

Railways and Bridges.—The mileage of railway track in the province in 1899 was 3,345 miles. A new railway was subsidized for colonization purposes, between Labelle and Lake Nomingui, with \$5,000 a year for twelve years. The South Shore Railway Company was granted \$8,900 annually for ten years, to build bridges over St. Francis and Yamaska rivers. The great event of the year, however, was the large Dominion grant of \$1,000,000, and a promise of another million, to the proposed bridge over the St. Lawrence, near Quebec. The provincial subsidy was \$250,000, and a grant of \$300,000 came from the city of Quebec.

Mines.—The iron ore produced by the province in 1898 amounted to 17,873 tons. The gold production was only \$4,916 in value in 1899. The silver production was \$43,655. The phosphate was valued at \$9,200.

Colonization.—The amount spent in 1899 for colonization, including grants to colonization societies, was \$79,000. Much of this was spent on 527 miles of road and 13,047 feet of bridge work. Half of the total amount of grants went to the Metapedia, Lake St. John, and Ottawa districts alone. All bridges are constructed under the immediate supervision of the Department of Mines and Colonization. Its annual report for 1899 recommended that lands for settlement be sold only where they would be easy of access, in order to group colonies together as far as possible, and to enable the department to see readily who were *bona fide* settlers. About 278,105 acres of land were surveyed, at a cost of \$36,037. The expenditure of the department for 1898-'99 amounted to \$140,493. The Quebec office handled 3,146 immigrants and the Montreal office 2,550, the great majority of them being English, Scotch, and Irish. The number of repatriated French Canadians was 5,561 for the year.

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REFORMED CHURCHES. **Reformed Church in America.**—The Committee on the State of the Church reported to the General Synod of this Church in June the following numbers for the denomination: Of churches, 643; of ministers, 715; of families, 60,716; of communicants, 109,899; of admissions during the year on confession, 4,696; of Sunday schools, 925, with 124,248 enrolled members, 25,061 of whom were under systematic catechetical instruction; of Christian Endeavor Societies, 475 senior, 200 junior; and between 40 and 50 Societies of the Brotherhood of Andrew and Philip. Amount of contributions for benevolent purposes, \$354,343, or \$38,061 more than in 1899; for congregational purposes, \$1,900,000. The Sunday schools had contributed \$21,817, and the Christian Endeavor Societies \$9,198 to foreign and domestic missions and education. Twenty-two hundred and sixty-one persons had been received into the communion of the Church from the Sunday schools. The apparent whole number of communicants had been reduced 1,766 through a revision of the rolls in accordance with a recommendation of the previous General Synod.

The Committee on Domestic Missions reported that it had closed its year free from debt, with a balance of several hundred dollars in its treasury. Of the 650 churches, 227 were aided by the committee.

The Board of Education reported itself for the first time in half a century out of debt.

The Committee on the Disabled Ministers' fund returned a slight increase of contributions from the churches, but no increase of income from invested funds. Of its 46 beneficiaries, 34 were women. A proposition from the mayor and citizens of Pekin, Ill., for the establishment of a ministers' home of the Reformed Church in connection with a hospital contemplated in that city was referred by the General Synod to the Board of Direction.

The present total capital of the Widows' fund was returned at \$107,828, showing an increase for the year of \$1,044. The year's receipts had been \$11,782, and the payments \$10,189. The full amount of \$200 had been paid to annuitants.

The year's contributions for the Theological Seminary at New Brunswick, N. J., had been \$4,005 for current expenses, and \$27,036 for en-

dowment. Since the institution of the special Committee on Finances of this institution, in 1897, \$7,439 had been received for current expenses, and \$28,351 for endowment. A single gift of \$25,000 had been made by Mr. Ralph Voorhees.

The receipts of the Board of Foreign Missions for the year ending April 30, 1900, were \$108,000 for the regular work, and, including special gifts, \$136,576 in all, besides \$10,637 contributed for the Arabian mission; making a total of \$147,213.

The receipts of the Woman's Board were, further, \$50,683.

The General Synod met at Asbury Park, N. J., June 6. The Rev. Edward P. Johnson, D. D., of Albany, N. Y., was chosen moderator. The Committee on the State of the Church presented statistics of the growth of the Church during the past fifty years, showing that the number of particular synods had increased from 2 in 1850 to 4 in 1900; the number of classes, from 24 to 35; of churches, from 292 to 643; of ministers, from 293 to 715; of communicants, from 33,553 to 109,899; of Sunday-school scholars, from 19,791 to 124,248; and the amount of offerings for foreign missions, from \$9,606 to \$155,943, and of those for domestic missions from \$5,095 to \$90,054—the statement revealing that in fifty years the number of churches and ministers had more than doubled; the number of communicants had multiplied more than threefold, and of Sunday-school scholars more than sixfold; and the offerings for foreign and domestic missions were more than sixteen times as large as in 1850. The number of persons received on confession in 1850, 1,325, represented an average of about 4½ to each church; the number in 1894, 6,114, an average of about 10. But the number received on confession during the past year was less than for any one of the ten preceding years, while within the past six years, with one exception, the number had decreased from 6,114 in 1894 to 4,695 in 1900. A similar tendency to slackening of increase in membership was observable in other denominations. The Synod, in view of the approaching beginning of the twentieth century, resolved to observe the first week in January, 1901, as a special season of thanksgiving and prayer, and especially to celebrate the new era by the collection of offerings, \$250,000 being the amount desired, for the endowment and proper equipment of the Theological Seminary, at New Brunswick, N. J. A special committee was appointed to consider the system of instruction in the Sunday schools and propose methods for making it more efficient in training the minds and hearts of children and youth. Other special committees were appointed to revise the forms or prepare new forms for ordination and installation of ministers and of elders and deacons; to revise the baptismal forms; and to devise some plan of oversight and regulation for bringing vacant churches and unemployed ministers and candidates together. In order to meet the increasing demands on ministerial service, and to furnish enlarging opportunities for preparation among the graduates of the theological seminaries, the larger churches were recommended to employ younger ministers, wherever it was practicable, as assistants to the regular pastors. The classes were requested to appoint each a permanent committee on educational institutions. Steps were directed for securing a full endowment for the Western Theological Seminary. One two-year post-graduate course was instituted for each of the seminaries, and a number of other measures were advised for the extension and improvement of ministerial education. The support of individual missionaries or

of particular fields by single churches or groups of churches and by individuals having means was commended. In order to extend the usefulness of the particular synods, the giving of them more the character of a conference embodying a representation of all general church activities, was advised, to which end arrangements were suggested for holding in connection with the regular work of the synod public meetings in behalf of the enterprises of the Church. The report on the Sabbath declared any and all secularization of the Lord's Day destructive of its beneficent design and inimical to public and private morality. A resolution of sympathy with the Reformed Churches of South Africa was passed.

This resolution, having been transmitted to the envoys of the South African republics to the United States, P. Louter Wessels, replying for them, said: "The Dutch Reformed is a very strong Church in our country. The majority of the Boers are members of that Church, although they are granted absolute facilities and freedom to join any other denomination. The Dutch Reformed Church has its houses of worship established in every city and village in South Africa, and its pastors are well paid and their services well attended. Several theological institutions are established, where the ministers have to spend several years in preparation for the ministry. The influence of our Church educational and missionary work is advanced on every hand."

REFORMED EPISCOPAL CHURCH. The Committee on the State of the Church reported to the General Council of this body in May, 1900, that the number of communicants was 10,000, and that of members of Sunday schools 19,782. A distinct gain in three years was shown. The churches had raised for all purposes \$165,811, and held property having an aggregate value of \$1,573,556. Seating capacity was provided in the church buildings for nearly 20,000 persons.

The sixteenth triennial General Council met in Baltimore, Md., May 16. Bishop James A. Latané, D. D., was chosen presiding bishop. The treasurer reported that his receipts had been \$17,091, and that no liabilities existed, while a balance of \$3,943 remained on deposit. The sum of \$40,718 had been received for the Theological Seminary, and its accounts showed a balance in bank of \$2,420. A resolution was unanimously passed urging the clergy to present to their parishes the subjects of a better support of the seminary, and of inducing a larger number of young men to enter the ministry. The treasurer of the special Church Extension Trust reported that \$21,884 had been received for it, and a balance of \$1,364 stood to its credit. The Council voted, in accordance with the wishes of the creator and donor of this trust, to dissolve and reorganize it. The Board of Foreign Missions had received \$14,971. The Publication Society returned \$5,000 worth of stock, with business done during the year to the amount of \$7,011. The sessions of the Council were largely devoted to the consideration of questions relating to the constitution and canons. A proposition to insert a clause requiring from all candidates for the ministry a pledge of abstinence from the use of alcoholic liquors and tobacco was withdrawn, after a debate which revealed a considerable difference of opinion among the members of the Council.

RHODE ISLAND, a New England State, one of the original thirteen, ratified the Constitution May 20, 1790; area, 1,250 square miles. The population, according to each decennial census, was 68,825 in 1790; 69,122 in 1800; 76,931 in 1810.

83,015 in 1820; 97,199 in 1830; 108,830 in 1840; 147,545 in 1850; 174,620 in 1860; 217,353 in 1870; 276,531 in 1880; 345,506 in 1890; and 428,556 in 1900. Capitals, Providence and Newport; after 1900, Providence only.

Government.—The following were the State officers in 1900: Governor, Elisha Dyer, succeeded May 29 by William Gregory; Lieutenant Governor, William Gregory, succeeded by Charles D. Kimball; Secretary of State, Charles P. Bennett; Treasurer, Walter A. Read; Attorney-General, Willard B. Tenner; Auditor and Insurance Commissioner, Charles C. Gray; Superintendent of Education, Thomas B. Stockwell; Adjutant General, Frederick M. Sackett; Railroad Commissioner, E. L. Freeman; Commissioner of Industrial Statistics, Henry E. Tiepke; Record Commissioner, R. Hammett Tilley; Factory Inspectors, J. Ellery Hudson, Helen M. Jenks; Surgeon General, George H. Kenyon; Inspector of Beef and Pork, James R. Chace; Inspector of Lime, Herbert Harris; Commissioner of Sinking Funds, John W. Danielson, succeeded by Olney Arnold; Inspector of Cables, S. B. Hoxsie; Inspector of Scythe Stones, W. H. Comstock, succeeding Benjamin Wilson; Chief Justice of the Supreme Court, Charles Matteson, who resigned after a continuous service of over twenty-five years, and was succeeded May 29 by John H. Stiness; Associate Justices, Pardon E. Tillinghast, George A. Wilbur, Horatio Rogers, W. W. Douglas, Edward C. Dubois, John T. Blodgett; Clerk, B. S. Blaisdell. All the State officers are Republicans.

The elections of State officers have been held annually in April, but by a recent change in the Constitution they will be held hereafter in November. Inauguration of officers will take place the first Tuesday in January. Annual sessions of the Legislature have been held at Newport beginning the last Tuesday in May, and annual adjourned sessions at Providence beginning in January. By the amendment to the Constitution, there will hereafter be but one annual session, at Providence, beginning the first Tuesday in January. The length of the session is not limited, but the pay of legislators ceases at the end of sixty days; it has been increased from \$1 to \$5 a day. The Legislature consists of 38 Senators and 72 representatives. The Constitution provides that a new apportionment may be made after a census has been taken by authority of the State or the United States.

Population.—The increase of population in the last decade was 83,050, or 24 per cent. In the decade next preceding the increase was 24.9 per cent. The population by counties is as follows:

COUNTIES.	1890.	1900.
Bristol	11,428	13,144
Kent	26,754	29,966
Newport	28,552	32,599
Providence	255,128	328,688
Washington	23,649	24,154

Among the towns and cities, Cranston shows the largest percentage of gain, 64.79. East Providence and North Providence each show a gain of 44.91 per cent., and Pawtucket 41.98. The census returns of the larger places are as follow: Providence, 175,597; Pawtucket, 39,231; Woonsocket, 28,204; Newport, 22,034; Warwick, 21,316; Central Falls, 18,167; Cranston, 13,343; East Providence, 12,138; Lincoln, 8,937; Cumberland, 8,925; Westerly, 7,541; Bristol, 6,901; Burrillville, 6,317; Coventry, 5,279; Warren, 5,108; South Kingstown, 4,972; Johnston, 4,305; North Kingstown, 4,194; Scituate, 3,361; North Providence, 3,016;

Tiverton, 2,977; East Greenwich, 2,775; Hopkinton, 2,602; North Smithfield, 2,422; Smithfield, 2,117; Portsmouth, 2,106.

Finances.—The balance in the treasury at the beginning of the year was \$52,557.28; the receipts during the year, \$1,481,479.75; total, \$1,534,037.03. Among the sources of receipt were: Tax assignments, \$296,693.58; State tax, \$347,424.79; institutions for savings, \$351,966.46; State insurance companies, \$73,719.28; foreign insurance companies, \$83,893.27; building and loan associations, \$401.21; town councils, \$116,257.76; State institutions in Cranston, \$50,323.78; State home and school, \$275.86; school fund dividend, \$8,710.98; charters, \$14,140; civil commissions, \$2,392; peddlers' licenses, \$2,485; auctioneers, \$1,900.50; Commissioners of Shell Fisheries, \$20,973.08; commercial fertilizers, \$2,658; interest on deposits of the revenue, \$2,038.30; National Home for Disabled Volunteer Soldiers, \$12,179.81; Supreme Court, \$22,653.46; tax on street railway companies, \$24,485.80; on telephone companies, \$4,259.29; on telegraph companies, \$881.79; on express companies, \$449.80.

The disbursements for the year amounted to \$1,355,447.95. Among the items are: Salaries, \$137,499.22; expenses of General Assembly, exclusive of clerks and committees, \$17,159.46; support of the State institutions in Cranston, \$300,323.78; interest on Statehouse construction bonds, \$76,500; interest on money borrowed, war with Spain, \$5,800; militia and military affairs, \$37,500; readjusting ward lines, city of Providence, \$4,569.31.

The military and naval expenses occasioned by the State's connection with the late war with Spain appear to be kept as a separate account. Under this head the total receipts, including the balance on hand at the beginning of the year and a check on account from the United States Treasury Department for \$32,601.46, were \$34,340.39. The payments include the cancellation of a note for \$10,000 and the payment of \$20,000 on another note, and amount in all to \$30,472.47, leaving a balance on this account of \$3,867.92. The notes outstanding amount to \$180,000. The War Auditor held \$44,776.80 of the State's claim for additional evidence, and recommended that \$37,300.41 be rejected as being for charges not deemed proper by the department.

The balance in the treasury at the close of the year was \$178,589.08.

The bonded debt of the State amounts to \$2,300,000.

Education.—The Legislature appropriated \$140,000 for the support of public schools, \$57,500 for the normal school, \$800 for institutes and lectures, \$6,000 for evening schools, \$3,500 for the School of Design, \$4,000 for purchase of school apparatus, \$14,000 for education of blind and imbecile children, \$136,700 for the Institute for the Deaf, \$15,000 for the College of Agriculture and Mechanic Arts, and \$7,000 for free public libraries.



WILLIAM GREGORY,
GOVERNOR OF RHODE ISLAND.

Eight towns took advantage of the new law for granting State aid to high schools. The Normal School graduated a class of 52 in June.

The endowment fund for Brown University had reached \$1,031,100 at the time of commencement. In addition, a bequest of \$45,000 had been made by Mr. Van Wickle for a gateway and administration building, and Mrs. H. N. Slater had given her residence for a home for students of Pembroke; it will accommodate 20 students. The whole number of students in 1899-1900, including graduates and special students, and those of Pembroke College, was 870. The number of graduates after the last commencement was 5,267, of whom 172 were women.

Fifty free public libraries are receiving aid from the State.

The report of the trustees of the School for the Deaf shows: Number of pupils, 68; number of boys, 39; number of girls, 29; present attendance, 66.

Militia.—The annual return of the organized Naval Militia shows 15 officers, 32 petty officers, and 157 enlisted men, a total of 204. The annual return of the organized militia shows 156 officers, 287 noncommissioned officers, 47 musicians, 836 privates, a total enlisted force of 909, with an aggregate of 1,356. This was divided as follows: Brigade and general staff, 19; cavalry, 111; chartered companies, 342; batteries, 57; infantry, 740; signal corps, 5; hospital corps, 41; machine gun battery, 41.

The appropriations for the militia during the year amounted to \$51,500.

The encampment at Quonset was attended by about 84 per cent. of the brigade, the largest attendance in recent years. The Naval War College opened at Newport, June 4.

Charities and Corrections.—Of the State institutions at Cranston, the Governor said in his message: "The most important step taken by the Board of State Charities and Corrections in the year now closed is the signing of the contract for the construction of the dining hall and service building at the State Hospital for the Insane, work on which has begun. The need of additional accommodations at the State Prison and Providence County jail has been referred to in the annual reports of the board for a number of years, and it is as serious now as before. On Nov. 1 there were 189 State prisoners, 65 of whom had to be placed in the jail wing, leaving but 59 cells and the temporary building to accommodate 245 men, 114 men having to be placed in the 59 cells. The total capacity of the 5 homes, or cottages, at the Sockanosset School for Boys is 250 beds, 50 in each home. On Nov. 1 the number of boys at the school, 354, exceeded the capacity of the homes by 104. The superintendent of the Oaklawn School for Girls reports the same overcrowded condition as that of the Sockanosset School. There are now 42 girls at the school, with about 20 outside, in families. The building has accommodations for about 30, or possibly 35, although it holds all who are now there."

The annual report of the Board of Soldiers' Relief shows that the membership of the home, Dec. 31, 1899, was 186, and that there was a net gain of 8 members during the year. Since the opening of the home 490 have been admitted. The average age of the members of the home was sixty, on Dec. 31, and the average number present during the year 1899 was 156. The average cost of maintenance per capita was \$247.69. There were 137 pensioners in the institution at the end of the year, and the total amount of pension money received during the year was \$13,436.80.

The State Society for the Prevention of Cruelty to Children reported having investigated 360 new cases, involving 631 children. It investigated 100 more cases than in 1899, and bettered the condition of 185 more children.

Banks.—Thirty-five savings banks and institutions for savings, of which 6 are in process of liquidation, filed reports for 1900. The following items furnish data as to these institutions: Number of institutions for savings, 35; amount of deposits, \$74,846,759.30; number of depositors, 148,695; number depositing \$500 and under \$1,000, 19,600; number depositing \$1,000 and upward, 23,400; number depositing under \$500, 105,695; average rate per cent. of annual dividend for 1900, 3.93; amount of reserved profits, \$2,395,934.31; increase of deposits from previous years, \$1,660,135.29; increase of depositors, 2,874; average deposits to each depositor, \$503.36.

Several banks were consolidated in 1900 with the Industrial Trust Company. Eleven trust companies filed statements this year, 3 more than last year. The aggregate capital of these companies amounts to \$4,107,634, against \$2,808,829 in 1899—an increase of \$1,298,804. A large portion of this increase—viz., \$1,100,000—represents the capital stock of the three newly organized companies. They report deposits in participation account to the amount of \$16,852.88, and in general account \$23,295,551.65.

Railroads.—From the commissioner's report it appears that the capital stock of the steam roads owned and operated in this State is \$105,582,475; total indebtedness, \$71,855,919.04; total receipts, \$43,858,651.32; net earnings, \$6,614,602.44; miles of road in this State, 209+; miles single track, 435.

The capital stock of the electric roads is \$16,582,000; total indebtedness, \$4,410,054.70; total receipts, \$2,609,572.26; expenditures, \$1,644,029.26; net earnings, \$965,543; miles of road in this State, 208+; miles single track, 248.

Products and Industries.—The report of the factory inspectors for 1900 says: "We have inspected 595 establishments during the year 1900. This is an increase of 46 over the number visited in 1899. The new establishments are pretty evenly distributed among the varied industries of the State. The number employed in the various establishments coming under the law was found to be as follows: Males of sixteen years of age and over, 44,337; females of sixteen years of age and over, 32,215; whole number of adults, 76,552. Males under sixteen years of age, 2,844; females under sixteen years of age, 2,409; whole number of children, 5,253. Total number employed, 81,805. A comparison of the foregoing figures with those reported last year shows an increase of 2,502 in the number of men employed, an increase of 1,754 in the number of women employed, an increase of 289 in the number of boys employed, and an increase of 298 in the number of girls employed, a total increase of 4,843."

There have been strikes during the year at the Lonsdale mill, and at Warren, Westerly, and Pawtucket, the most serious being at the Lorraine mills, in Pawtucket. This began about April 11. The cause, as stated by the weavers' committee, was that, while there was a general increase in wages throughout the country about six months before, there was none at the Lorraine mills. When the weavers applied for an increase, the treasurer offered advances on certain kinds of cloth, which amounted to about 1 per cent. of a general advance; but he proposed that the weavers take 4 looms instead of 3, which would give \$12.60 a week instead of \$10.80, pro-

vided a man could run the 4 and turn off the specified amount of cloth; but this they said they could not do.

The oyster industry has shown great prosperity in the past three years. There are 3,226 of the State acres leased; 1,892 return to the State \$10 an acre, and 1,338 \$5 an acre. With land yet to be leased the income to the State for the current year from this source is estimated at nearly \$30,000.

It is reported that valuable mineral deposits have been discovered at Foster. One sample tested \$250 to the ton, containing gold, silver, nickel, and copper. The average assay tests show from \$25 to \$70 a ton.

The number of business failures in the State in 1900 was 83, with liabilities amounting to \$722,868; while in 1899 there were 98 with liabilities of \$1,817,747.

The New Statehouse.—The new Capitol, at Providence, in which all the legislative sessions are hereafter to be held, was ready for occupancy Jan. 1, 1901. It is a fine and costly marble structure, with a dome and rich interior work of marbles and carvings, and wall decorations in color. The frieze around the dome bears the quotation from Tacitus: "*Rara temporum felicitas ubi sentire quæ velis et dicere quæ sentias licet.*" (O rare felicity of the times when it is permitted to think what you wish, and to say what you think.)

In early colonial days in Rhode Island the General Assembly, or what corresponded to the present body of that title, met in the four towns—Newport, Portsmouth, Providence, and Warwick. Newport was made, by the terms of the royal charter, the principal seat of government in 1663. But the Assembly still met in the four towns. Portsmouth was finally omitted from the circuit on account of its proximity to Newport, and in the early part of the eighteenth century South Kingstown was added to the list of meeting places. Later, East Greenwich became an occasional meeting place, while Warwick was dropped. The Constitution of 1842 made Newport, Providence, Bristol, East Greenwich, and South Kingstown the meeting places of the General Assembly, but twelve years later an amendment provided for the holding of an annual session at Newport and an adjournment to Providence. The Legislature has met at Newport in May, and after a brief sitting has adjourned to meet in Providence in January. The session at Providence has been more extended than that at Newport, and the State offices have been there.

Providence.—The city celebrated this year the centennial of the establishment of its free public schools. A bequest of about \$200,000 has been made to the city by Anna H. Man, providing a trust fund for Roger Williams Park. She left \$10,000 to the Society for the Prevention of Cruelty to Animals. Charles H. Smith left the income of about \$200,000 of property to be used for increasing the botanical collections at the park.

The bank clearings for 1900 amounted to \$326,299,700, which is nearly \$9,000,000 less than those of 1899. The number of building permits issued was 1,122, against 1,268 the year preceding. A new public library building was opened in March.

Newport.—The new city hall was formally turned over to the city in October.

Pawtucket.—A bequest of \$40,000 has been left to Pawtucket institutions by Moses Pierce, of Norwich, Conn. Pawtucket's debt amounts to more than 10 per cent. of its total valuation.

Watch Hill.—The assessors' books at Westerly show that the assessed valuation of prop-

erty at Watch Hill in that town is approximately \$1,000,000. Within the last five years the cottage settlement has steadily increased, until now there are probably 60 villas.

Political.—The State election took place April 4. The Republican convention, at Providence, March 13, made the following nominations: For Governor, William Gregory; Lieutenant Governor, Charles Dean Kimball; Attorney-General, Willard B. Tanner; Secretary of State, Charles P. Bennett; General Treasurer, Walter A. Read.

The resolutions, after praising the national administration and the acts of Congress, approved the State administration and the action of the General Assembly in proposing to alter the Constitution by specific amendments, and said further: "The insincerity of the State Democracy appears in its denunciation of monopolies and trusts, while leading members of its own organization are actively engaged in their promotion, both within and without the State; in its denunciation of imperialism and centralization of power while selecting as its nominee for Governor a Federal official in plain defiance of the provisions of the Constitution that no person holding an office of trust or profit under the United States shall act as Governor or other general officer; in its boastful pretense of favoring the purity of the ballot while so fraudulently stuffing the ballot boxes in the Fifth Ward of Pawtucket at its last caucus as to cause the Democratic chairman of the Board of Canvassers of that city, upon an appeal taken by a Democrat under a Republican caucus act, to decide his own party caucus was fraudulent and void; and in assuming to be the special friend of the workingman while seeking the defeat of William Gregory, who as boy and man has been a mill operative and wage-earner."

The Democratic Convention met March 15, and named the following candidates: For Governor, Nathan W. Littlefield; Lieutenant Governor, Joseph H. Boucher; Secretary of State, Clark Potter; Treasurer, Fayette Bartlett; Attorney-General, Dennis J. Holland.

After criticising the colonial policy of the administration, denouncing trusts, and reaffirming the principles of the party, the resolutions said: "In the words of the Father of his Country we declare that 'the basis of our political systems is the right of the people to make and alter their constitutions of government!' This, the first and most important provision of our State Constitution, is now held to be null and void by a Republican machine, which refuses to take one step toward its restoration. A constitutional convention should be held at the earliest day possible. Among the changes needed in the organic law of the State, the two following are the most urgent: First, the establishment of a just representation of the people in both branches of the General Assembly.

"Second, the giving to the 30,000 registry voters residing in our five cities the right, which justly belongs to them as bearers of all the burdens of citizenship, to vote for members of city councils, constituting, as those bodies do, by far the most important part of municipal government.

"We demand protection for the public and for street railway employees by a ten-hour law, and also that vestibules be placed upon all new cars.

"We call the attention of the voters of the State to the now established habit of the Republican majority in the General Assembly of postponing all important business until after their successors have been elected."

Nominations were made by the Prohibition and Socialist-Labor parties.

The Republican candidates were elected. The vote for Governor stood: Gregory (Republican), 26,043; Littlefield (Democrat), 17,184; Reed (Socialist-Labor), 2,858; Metcalf (Prohibitionist), 1,848.

On joint ballot the Republicans have 96 votes in the Legislature, to 14 of the Democrats.

The amendment to the Constitution changing the time of election was carried by a vote of 24,351 to 11,959, and the proposition to issue bonds to finish the Statehouse was carried by 28,253 to 15,246.

At the November election the vote was: McKinley, 33,784; Bryan, 19,812; Woolley, 1,529; Malloney, 1,423.

Legislative Session.—The adjourned session at Providence opened Jan. 30 and closed May 4. The Newport session began May 29 and ended June 13. Frank E. Holden was Speaker of the House. The Governor presides over the Senate.

A constitutional amendment was passed and carried at the November election. It provides that the annual election of State officers shall be held in November instead of in April, and voters to be registered must be on the list before July 1. The method of procedure for filling vacancies was changed. The provision requiring votes for State officers to be sent sealed to the Secretary of State, and to be counted and declared by the Legislature in grand committee, was repealed. It is provided also that there shall be but one annual session of the Legislature, which is to be in Providence, beginning the first Tuesday in January, and members are to receive \$5 a day instead of \$1, as heretofore.

A voting-machine commission was created, and \$15,000 appropriated. It is to examine machines and report to the General Assembly. The Secretary of State is to buy the machines at a cost not exceeding \$250, and furnish them to cities and towns applying for them.

An appropriation of \$5,000 was made for an exhibit at the Pan-American Exposition; the Governor is to appoint five commissioners, who are to serve without compensation, and an executive superintendent with salary.

The game laws were amended. A penalty not to exceed \$500 was prescribed for the killing of a deer before Feb. 1, 1905, except in the case of a person killing a tame deer of his own. It was made unlawful to take or kill a rabbit, hare, or gray squirrel between Jan. 1 and Oct. 15. The open season for hunting birds was changed also. A fine of \$20 or imprisonment for thirty days or both was imposed for fishing otherwise than with a single hook and line, or taking fish from any private waters for breeding fish without the owner's consent, and a fine of \$15 for taking or having in possession black bass less than 8 inches long.

A law was passed to prevent importation of diseased cattle. A bounty of \$5 was offered for every wild fox killed.

A State commission of five members, to be appointed by the Governor, was created for constructing side paths and keeping them in order. The paths are to be 3 to 6 feet wide, and a license fee of 50 cents to \$1 is to be charged.

The extreme penalty for dealing in obscene literature was raised from one to two years' imprisonment, and the fine, formerly \$500, was placed at \$100 to \$1,000; and it was made unlawful to use an instrument uttering language or showing pictures tending to corrupt youth.

Other enactments were:

Prescribing a penalty for counterfeiting or imi-

tating trade-marks, labels, etc., which are to be filed with the Secretary of State.

Providing a penalty of \$20 for wearing a badge of Spanish War veterans without right.

Extending from six to twenty-four hours the time that persons arrested without warrant for cruelty to animals may be kept in custody.

Permitting manufacturing corporations to increase or reduce their capital stock only on a three-fourth vote of all the capital stock, all shares to have equal right to vote.

Permitting executors and administrators to provide for perpetual care of burial lots.

Requiring insurance companies to pay 2 per cent. tax on gross premiums and assessments on property and lives.

Making the salary of the Railroad Commissioner \$2,500 instead of \$1,000, and providing \$500 for salary of the deputy; requiring the railroad corporations to provide for the salary and expenses of the commissioner, not more than \$4,000.

Defining the legal weight of measures of certain commodities—apples, oats, coal, wheat, etc.—46 in all.

Providing for an issue of additional Statehouse bonds, not to exceed \$700,000, for finishing and furnishing the new Statehouse at Providence and laying out the grounds, to be voted upon in November.

An act creating a police commission for Newport was passed. The commission, which is to be appointed by the Governor, can appoint the chief of police, and has power to compel the production of books and papers, to punish for contempt, and is to have general control of the department. The question of the constitutionality of this act, so far as the power of appointment of the chief of police is concerned, was brought before the Supreme Court in August, and the Chief Justice decided that there was nothing contrary to the Constitution in that.

The law exempting manufacturing corporations from taxation for a certain number of years came before the court, and was upheld.

The act of 1899 prohibiting the use of trading-stamps was pronounced unconstitutional by the Supreme Court.

Appropriations were made, among which were: For expenses of the General Assembly, \$30,400; judicial expenses, \$134,500; education, \$238,300; for free public libraries, \$7,000; for the indigent insane, \$10,000; State printing and binding, \$42,000; military affairs, \$47,500; Board of Charities and Corrections, \$276,500; salaries, \$139,500; clerical assistance, \$11,200; interest on Statehouse bonds, \$76,500.

At the Newport session George P. Wetmore was elected United States Senator, to succeed himself. John H. Stiness was chosen Chief Justice, succeeding Charles Matteson, resigned, and John T. Blodgett was elected an Associate Justice.

ROMAN CATHOLIC CHURCH. General.

—The closing year of the century, consecrated by the Pope to solemn homage to the Divine Redeemer, was notable chiefly for the pilgrimages which flocked to Rome during the entire twelve months of jubilee. It was formally inaugurated on Christmas eve of 1899 by the ceremony of opening the holy door, and closed again a year later by a celebration in which the *porta sancta* was sealed up by his Holiness in person, to remain closed until the dawn of the twenty-first century. But within the twelve months begun on Dec. 24, 1899, Rome welcomed an influx of visitors greater than in any year since it was the mistress of the world. No count was kept of the jubilee pilgrims, but even in the summer season

their number never fell below 10,000 a week, and in the months when the atmosphere was tolerable the total rose at times to 30,000 a day. The pilgrims came from all over the world, and few if any were disappointed by failing to obtain a sight of the Pope. When it is considered that his Holiness is ninety years of age, his receptions to the pilgrims, occasionally as many as six a week in the Sistine Chapel to the body of a pilgrimage, followed by a private audience to the leaders, can be considered as little less than miraculous.

Among the receptions extended by the Pope was one on April 7 to 75 sailors from the American training ship *Dixie*. His Holiness received them in the Sistine Chapel, and the sailors waved the American flag and greeted the Pontiff with what the official account described as "*reiterati altissimi hurrah*."

The special ceremonies of the jubilee year included the erection on 20 Italian mountains of monuments in memory of twenty centuries of Divine redemption; the blessing of the *Agnus Dei*; the closing of the holy door; and the universal celebration of midnight mass, by his Holiness's permission, on the eve of the new century.

The ceremony of blessing the *Agnus Dei*, which is peculiar to years of jubilee, was performed by his Holiness on June 17, assisted by a cardinal bishop, a cardinal priest, and the sacristan of the papal palace. These historic little pieces of wax were all decorated with allusions to the present holy year. The ceremony itself consisted of the immersion of the *Agnus Dei* into blessed water and the blessing of them with balsam and chrism. On the obverse of several of the *Agnus Dei* was a figure of the Divine Redeemer with the words, dictated by his Holiness: "*Nil sit dulce magis quam corde quiescere Jesu—Leo XIII, P. M.*" and on the reverse a figure of the Lamb of God with the words: "*Ecce Agnus Dei qui tollit peccata mundi—Leo XIII, Pont. Max. Anno MDCCCC, Pont. XXIII.*" On other of the *Agnus Dei* was a representation of the holy door with the words: "*Haec porta Domini, Justi Intrabunt in Eam—Leo XIII, P. M.*" and on one side, "*Anno Jubilei*," and on the other, "*Roma*." On the reverse of these was a figure of the Lamb of God. The ceremony began at half-past five on Sunday afternoon with the blessing of the holy water by the papal sacristan, Mgr. Pifferi, O. S. A., Bishop of Porphyrium. His Holiness was not present at this part of the ceremony. The preparations made in the Hall of Consistory were tables covered with white cloths and bearing silver basins with water and silver scoops. The sacristan performed the blessing of the water according to the usual rite, assisted by the Augustinians of the papal sacristy. His Holiness was borne into the hall in *portantina*, accompanied by his court, an escort of the Noble Guard, and the Swiss and Palatine officers on duty, as well as by Cardinal Mocenni, Bishop of Sabina, and Cardinal Cretoni, priest of Santa Maria sopra Minerva. His Holiness put on the stole, recited some prayers at the throne, and descended to the tables, where he stood before the central basin, blessed the water a second time, and poured into it, using the form of a cross in pouring, balsam and chrism. He removed some of the water with the scoop into the two basins on either side, returned to his throne, and incensed the *Agnus Dei*, which filled three large coffers to the left of his throne. The Pontiff and the two cardinals next put on aprons of gauze, descended from the throne, and immersed the *Agnus Dei* in the three basins of consecrated water. The action of each was identical. The

Agnus Dei were handed to the celebrants by the Cistercian monks of Santa Croce in Gerusalemme and San Bernardo alle Terme and the ordinary pontifical chaplains; immersed by the Pope, the cardinal bishop, and the cardinal priest in the blessed water; removed by these with scoops, and delivered to the Cistercian monks, who took them to a large table at the side, and there dried them with towels.

The most important papal utterance of the jubilee year was the encyclical letter, *Jesus Christ Our Redeemer*, issued on Nov. 1, and directed to the Universal Church. It expressed most strongly the lifelong wish of his Holiness for the unification of Christendom. Its tenor may be learned from a characteristic paragraph:

"How is it that, in spite of all the zeal for the welfare of the masses, nations are in such straits and even distress, and that the evil is daily on the increase? We are told that society is quite able to help itself; that it can flourish without the assistance of Christianity, and attain its end by its own unaided efforts. Public administrators prefer a purely secular system of government. All traces of the religion of our forefathers are daily disappearing from political life and administration. What blindness! Once the idea of the authority of God as the judge of right and wrong is forgotten, law must necessarily lose its primary authority and justice must perish; and these are the two most powerful and most necessary bonds of society. Similarly, once the hope and expectation of eternal happiness is taken away, temporal goods will be greedily sought after. Every man will strive to secure the largest share for himself. Hence arise envy, jealousy, hatred. The consequences are conspiracy, anarchy, nihilism. There is neither peace abroad nor security at home. Public life is stained with crime."

Another important utterance of his Holiness was the address to the cardinals on the occasion of his ninetieth birthday, in which he gave the public the first intimation of his attitude on the South African War by a request that the cardinals would pray with him for the termination of the conflict and the agreement of both sides engaged. Others were a letter from his Holiness to Cardinal Respighi, Vicar of Rome, asking for prayers for the safety of the Christians in China, and an address to the American pilgrimage, in which he gave assurances of the affection in which he held this country, after which he touched and blessed the American flag.

Two saints were canonized in the course of the year, the greater of whom was Jean Baptiste de la Salle, the founder of the order of the Christian Brothers, and the first to put upon a practicable basis any plan for teaching the children of the poor. St. Rita de Cascia, of the order of St. Augustine, was canonized at the same time. An idea of the thoroughness of inquiry which precedes canonization may be gained from the fact that the cause of Jean Baptiste de la Salle had been before the Sacred College since 1839, and his beatification, which is the second step in the process of which canonization is the third, is thirteen years old. St. Rita de Cascia was beatified in 1627, her cause having then been before the Sacred College for two hundred and twenty-five years. Seventy-six martyrs who died in China in the beginning of the century were beatified about the time that their successors were being put to death by the Boxers. Others beatified were the venerable Dionysus of the Nativity and Redemptus of the Cross, Maria Maddalena de Barco, Antonio Grassi, Maria Crescentia Hüss,

and Jeanne de Lestonnac. The last named was foundress of the Filles de Notre Dame. She was born a Calvinist, and received her instruction in the Catholic faith, curiously enough, from her uncle, Michel Eyquem de Montaigne.

Pope Leo's greatest undertaking in the material order was concluded in October by the consecration of the abbatial Church of St. Anselm, on the Aventine Hill. The building was not only designed and planned by his Holiness, but the funds to erect it were supplied by him. The ceremony of consecration was performed by Cardinal Rampolla, delegate of his Holiness *a latere*. More than 50 abbots of the Benedictine order were present from all parts of the world, for the new abbey is an international school. In accordance with a Benedictine custom, the consecrating prelates began the ceremony with a vigil which lasted all night.

The entrance of the Pope upon the ninetieth year of his age was celebrated by the presentation to the Pontiff of an address signed by more than 600 nonagenarians, and a dinner to 900 of the poor of Rome in the Belvedere courtyard of the Vatican.

A Congress of Christian Archæology was held at Rome April 17 to 25. Among the most important of the subjects discussed was a motion for the rediscovery of the stairs leading to the crypt in which lie the remains of St. Peter, upon the theory advanced that the ancient entrance was utilized in the building of Constantine's basilica, and that under the tribune to the chapel of the confession would be found the door. It was determined to begin explorations at this point, in case the Pope's consent could be obtained.

Pursuant to a summons from the Holy See, the Friars Minor Capuchin, the Friars Minor Conventual, the Friars Minor, and the Third Order Regular met in Rome in September to the number of 10,000. These four orders comprise all the Third Order of St. Francis. The end of the congress was the social regeneration of the world, especially by means of the re-establishment of domestic life among the poor, the raising of wages, the equalization of taxation, and opposition alike to socialism and the tyranny of capital.

At a chapter general of Ursuline religious at Rome the different branches of the order were unified, a superior general elected, and constitutions for all houses of the order agreed upon. The initiative to this movement was given by the Pope, who has in the past few years unified many of the great religious orders.

An International Catholic Scientific Congress was held at Munich in September, and was attended by scientists and theologians of all religions to the number of about 1,000.

Five cardinals died in the year: Cardinal Trombetta, aged seventy-nine; Cardinal Jacobini, Vicar General of Rome, aged sixty-three; Cardinal di Canossa, aged ninety, the Dean of the Sacred College, and senior to his Holiness; Cardinal Mazella, aged sixty-seven; and Cardinal Haller, aged seventy-five.

The United States.—Early in the year the Pope approved the decision of the Propaganda forbidding the Christian Brothers to teach classics. This was the letter and spirit of the original rule, and the Sacred Congregation saw no alternative but to compel them to return to it. By the decision the teaching of classics by this order was permitted only to the end of the year.

Considerable agitation took place among Catholics as a result of the efforts of Bishop McFaul, of Trenton, to redress the grievances suffered by

his coreligionists in the United States. Organization was the means suggested by his lordship of giving strength to any Catholic plea for equal civil and political rights. In support of his thesis that members of the Roman Catholic Church have not a fair chance for political office, or even for the enjoyment of civil freedom and possession of property, he cited some important events of the year. Upon neither of the Philippine commissions was a Catholic appointed, although the great body of the Philippine people belonged to the Catholic faith, and one of the gravest questions to come before the commissions was that dealing with the status of the friars in the islands and the disposition of ecclesiastical property. His lordship further instanced the fact that while in 1901 the Catholics of the country numbered 12,000,000 out of a total of 70,000,000, or about one sixth, their representation in the House of Representatives consisted of 24 members out of 355, and in the Senate 2 out of 88. A confederation of Catholic societies under the direction of an advisory board was the plan outlined by Bishop McFaul. Although the scheme was met with considerable favor, little had been accomplished before the end of the year toward the organization proposed.

The need of better Catholic representation in high political circles was manifested by the failure of Congress to renew its appropriation for the Jesuit contract schools in its annual Indian appropriation bill. Senator Vest, of the Committee on Indian Schools, addressed the Senate in favor of the appropriation, giving it as his view that, apart from religious instruction whose dogmas he could not subscribe, the Jesuits were giving the Indians the only form of education which produced any results. Under their system the Indians received an industrial education, while in the Government schools only the usual elementary branches were taught. The percentage of attendance in the latter was 3 per cent. of the enrollment, and in the former 85 per cent. The appropriation was defeated.

The formal protest of the superioress of the Order of the Sacred Heart against the seizure of the convent of the order in Porto Rico by the military authorities was laid before President McKinley in April, was sent by him to the Porto Rican officials, and returned without action on their part. Meanwhile the convent, which was appropriated by the military authorities for use as a barracks during the war with Spain, was still so occupied at the close of 1900, the owners having been compelled to erect another building to take its place. The protest of the superioress of the order asked either the return of the building or some compensation for its seizure.

A similar protest was made in October by Archbishop Chappelle against the continued holding by the Government of the College of San José in Manila. The college was seized during Gen. Otis's administration, and the archbishop asked that the property be restored to the Church, to which he declared it belonged. The question as regarded this and other similar institutions was, whether the United States could succeed to the rights enjoyed by Spain as patron of ecclesiastical institutions under a contract which provided for royal support and endowment of the churches; in other words, whether the present government could claim the rights of a contract without assuming its burdens. The college by the will of its founder was put in charge of the Jesuits. When they were suppressed the Spanish throne claimed the right to succeed them as patrons under a grant from the papacy to interfere in church matters as a

return for support of ecclesiastical institutions. To this grant the United States could hardly fall heir because of its divorce of church and state. Since a number of institutions in Cuba and the Philippines are similarly situated, it is likely that the decision will ultimately be sought from the Supreme Court.

The edict of Gen. Wood prohibiting ecclesiastical marriages in Cuba was revoked on Aug. 13 by Gen. Brooke, and the church ceremony recognized as of the same validity as the civil contract. The edict had been issued in the preceding year, and its revocation was due to a petition signed by 30,000 Cuban citizens. By permission of the American authorities, the Dominicans established themselves in Cuba in May.

Important decisions of State and United States courts apparently affecting ecclesiastical rights were as follow during the year: That of the Supreme Court of Michigan (April 16), holding that the title to all church property was held by the bishop of the diocese in fee simple, and not merely as trustee for the congregations; that of the Supreme Court of Pennsylvania (April 23), holding that the united Greek Catholic congregations in America owed allegiance to the Roman Catholic Church and not to the Orthodox Greek Church; and that of the United States Circuit Court, New York (May 31), holding that statuaries and sculpture imported by the order and for the use of a society established solely for religious and charitable purposes were free from duty.

The centennial of the founding of the Society of the Sacred Heart was celebrated at every convent of the order, Nov. 21-23. The semicentennial or golden jubilee of the diocese of Savannah was celebrated Oct. 28, and the new cathedral dedicated by Archbishop Martinelli, papal delegate. The Cathedral of St. Patrick, Newark, N. J., celebrated its golden jubilee March 17.

Trinity College, in Washington, D. C., for the higher education of women, was solemnly dedicated, Nov. 22, by Cardinal Gibbons. The college was formally placed in charge of the Sisters of Notre Dame.

The work of Most Rev. Archbishop Keane toward securing funds for the Catholic University at Washington resulted in gifts to the institution of more than \$500,000 in the year. Endowments for six chairs were also received.

Rev. Dr. McGlynn, who was removed from his charge of St. Stephen's Church, in New York city, in the eighties because of his strong advocacy of the principles of Henry George; excommunicated for disobeying a summons to Rome, and later pardoned and restored to his offices, died in Newburg, N. Y., Jan. 7. Right Rev. Joseph Rademacher, Bishop of Fort Wayne, Ind., died on Jan. 12. Other losses by death in the American hierarchy were those of Most Rev. John Hennessy, Archbishop of Dubuque, Iowa; Right Rev. Tobias Mullen, D.D., formerly Bishop of Erie, Pa.; and Right Rev. James A. Healy, D.D., Bishop of Portland, Me. (For sketches of all these, see OBITUARIES, AMERICAN, in this volume.)

Episcopal appointments were as follow: Right Rev. B. J. Kelley, Savannah, Ga.; Right Rev. Henry Moeller, Columbus, Ohio; Right Rev. Denis O'Donoghue, Auxiliary of Indianapolis, Ind.; Right Rev. Henry Ganjon, Tucson, Ariz.; Right Rev. P. J. O'Reilly, Auxiliary of Peoria, Ill.; Most Rev. John J. Keane, Archbishop of Dubuque, Iowa; and Right Rev. Herman Alerding, Fort Wayne, Ind.

The number of Catholics in the United States was reckoned at 10,129,677, an increase of 222,265 upon the preceding year. They were ministered

to by 8,660 secular and 2,976 regular clergy in 6,409 churches, 3,930 missions, and 1,723 chapels. There were 3,811 parochial primary schools, with 854,523 children; 30 episcopal seminaries, with 2,630 students, and 79 seminaries of religious orders, with 1,998 students.

Canada.—The question of the Manitoba schools which had been a grievance of the Catholics of the province for ten years was raised again during the visit of Mgr. Falconio, apostolic delegate to Canada, to Winnipeg in October. While sympathizing with the Catholics of the province under their triple burden—for the existing law not only requires them to support the public schools as well as their own schools, but to pay taxes on their own school buildings besides—his Excellency recommended a course of patience and mildness until full justice was obtained.

The Right Rev. Bertrand Orth was appointed Bishop of Vancouver Island, Feb. 26.

England.—Dr. St. George Mivart, whose articles in two English periodicals for January aroused a storm of protest from English-speaking Catholics, was formally inhibited by Cardinal Vaughan, on Jan. 24, from approaching the sacraments. The objectionable articles contained statements denying or attempting to explain dogmas of the Catholic religion regarding the virginal birth of Christ, the perpetual virginity of the mother of God, original sin, the resurrection, the redemption, the everlasting punishment of the wicked, the inspiration of Scripture, and the authority of the Church. A formula containing a profession of faith and a retraction of his heresies was thrice presented to the aged and infirm scientist—he had been in the last stages of diabetes for more than a year—but he refused to sign. His death, April 1, at the age of seventy-three, furnished a substantial reason for the belief of his friends that his published opinions during the last year of his life were the result of mental aberration.

The agitation for a sufficient number of Roman Catholic chaplains in the navy to minister to the Roman Catholic sailors, discussion of which began in the latter part of the preceding year, reached a focus in February in the House of Commons in the nature of an amendment offered by an Irish member to reduce the naval appropriation unless the relief demanded was afforded Catholic sailors. It was asked that the Admiralty provide a Catholic chaplain for every squadron, with similar rank, pay, and allowances as those given to chaplains of the Established Church; to have a certain number of acting Roman Catholic chaplains where the number of their coreligionists among the sailors was large enough to need their ministrations; and to have a Catholic schoolmaster aboard every training ship. Considerable acrimony marked the discussion of the amendment, William Redmond quoting Cardinal Logue's pastoral protesting against Catholic parents allowing their children to enter a navy where absolutely no provision was made for their religious necessities. To this Austen Chamberlain replied that if the supply of recruits in the south and west of Ireland fell off, the training ship at Queenstown would be withdrawn. This ill-humored threat Mr. Goschen, First Lord of the Admiralty, hastened to soften by assuring the Irish members that some of the desired provision would be made. The strength developed for the amendment on the division gave zest to the Admiralty's eagerness to placate the opposition. After a number of conferences a system of shore chaplains was agreed upon, and chaplains for squadrons on active service and on all hospital ships were promised.

Another agitation, the results of which, if less

prompt, seemed likely to be more complete and satisfactory, was that looking toward the unification of the primary and secondary educational system for England and Wales. Under the system which had grown up in the past fifty years, Catholics had been allowed to build their own or voluntary schools, toward the support of which, as regards secular education only, a special aid grant had been annually made by Parliament, which amounted to about five sevenths of the cost of the secular education furnished. In addition to the subscriptions necessary to defray the extra two sevenths of expense, rates for the support of board schools in which nonconformist religious instruction was given were also levied upon Catholics. The Government before the elections announced its readiness (1) to unite all the schools under a central board as regards inspection and control, and (2) to provide a uniform system of secular education and uniform taxation to support it as soon as the different denominations concerned should agree upon the exact form of the measure. At a meeting of the English Catholic hierarchy resolutions were adopted calling for support of the schools out of the imperial exchequer on account of the inequality of rates. Accordingly a bill was introduced in October into Parliament providing, as regards secondary schools, for some of the reforms demanded.

Sunday, Oct. 7, was celebrated throughout England the golden jubilee of the restoration of the English hierarchy in 1850 by Pius IX, when Cardinal Wiseman was created Archbishop of Westminster.

For the first time for many years the Government, in forming a new administration, omitted to include a single Catholic, the Duke of Norfolk, who resigned his post as Postmaster-General to go to the war, being passed over in favor of his temporary successor. The new Parliament, however, had 4 Catholic members for England and 73 for Ireland, an increase of 1 and 4 over their representation in the Parliament preceding.

The estimated Catholic population of the United Kingdom was 5,500,000, and of the empire 10,500,000.

Charles Russell, Lord Chief Justice of England and its greatest Catholic layman since Thomas More, died Aug. 10, aged sixty-seven. With the exception of More, his was the highest judicial post ever held by a Catholic, and had he lived he would no doubt have succeeded More in the chancellorship.

Right Rev. John Vertue, D. D., Bishop of Portsmouth, died May 23, aged seventy-four. Other great losses to the Catholics of England occurred in the death of J. P. Crichton-Stuart, Marquis of Bute, Oct. 9, and Rev. Richard F. Clarke, S. J., Sept. 9.

Scotland.—The educational claims of Scotch and Irish Catholics were presented on the last Sunday in September in all the churches in Scotland by Archbishop Eyre of Glasgow, as forming an important issue in the general election then at hand. In Scotland all schools are denominational; but while the Presbyterian schools are supported by the Government, the Catholic schools receive no help from it.

The archiepiscopal see of St. Andrew's and Edinburgh was made vacant by the death of Most Rev. Angus McDonald, April 28, aged fifty-six. To succeed him, Right Rev. James A. Smith, Bishop of Dunkeld, was appointed Sept. 15. Another appointment of interest to the antiquarian was that of Rev. Francis McManus to the charge of a church erected during the year at Bannockburn, less than a mile from the battlefield.

Ireland.—The university question still held the center of the Irish stage, and as far as anything in the way of success greater than wide discussion was concerned seemed likely to continue to do so for a number of years. Speeches on the question were made without number, meetings by the score were held, and uncounted resolutions passed. These, as far as they went, were valuable as showing the temper of the people and the amount of sympathy enlisted in the cause. Chief among them was the pastoral of the Irish bishops, in synod assembled, in which the whole question was carefully gone over, and the argument ably presented. That the demand for a Catholic university for Ireland, Catholic in the sense in which Trinity College is Protestant, was entirely reasonable and just, was admitted by all or nearly all those who opposed it in the House of Commons when on March 23 the matter was brought to a vote. The university side was ably presented by Mr. Balfour and by the Irish members. There was no bill before the house, and the matter arose on a resolution that the Speaker leave the chair on the civil service estimates. Mr. Balfour urged Mr. Healy not to ask for a division, since the resolution presented a strict party question, division upon which furnished no criterion of the amount of sympathy the merits of the question commanded. Mr. Healy insisted, however, and the division disclosed 177 against the measure to 91 in support of it.

The Second Plenary Synod of Maynooth was held from Aug. 28 to Sept. 11. The first synod was held twenty years ago. Numerous ecclesiastical questions were discussed, and the pastoral already mentioned issued, in which the history of the Church in the island for the past twenty-five years was considered. The pastoral, besides its advocacy of the Irish national university, went into the question of intermediate education, and the system of national education was strongly condemned as antichristian. The agriculture act, providing for technical instruction in farming, was commended, though considered hardly radical enough to stop the drain of Irish emigration. The whole system of land laws, "in which rents are periodically made a matter of litigation before a tribunal in which neither side has confidence," was denounced, and in its place the bishops hoped to see as the solution of the Irish question a system of peasant proprietorship by which the great plains then almost worthless might be reclaimed, and the peasant himself restored to industry on his own land. The pastoral further condemned obscene literature, horse racing on Sundays, and secret political societies. The pastoral was published both in English and Irish.

Two questions of intermediate education, the first that of state support of denominational schools and the second the compulsory teaching of the Irish language in certain districts, were presented to the House of Commons by the Irish members. As to the first, complete support of Catholic schools by the state seemed as far off as ever when the debate ended. The plan for teaching Irish in the schools of the district where it was still the common language, while not formally adopted, was turned over to the Commissioners of National Education with permission to allow such teaching in exceptional cases.

The relief of Mafeking was celebrated by Orangemen in Belfast by breaking in the door of the Mater Hospital, and doing damage to Catholic churches and schools which cost the city corporation £3,000 to repair. The capture of Pretoria was similarly celebrated.

France.—The persecution of the religious congregations which took up so much of the time of

the French Chamber in 1899, was resumed in 1900 with singular ferocity. It began in January with the trial of the Assumptionist fathers. Like all French trials, the proceedings ranged from the merely offensive and irrelevant to the broadly comic. Twelve of the fathers were accused of being an association of more than 20 persons, and of dealing with questions of a political, social, and religious nature. In explaining the case for the prosecution, M. Bulot declared that 1,800,000f. were said to have been seen at the Assumptionist headquarters, and that there were grave reasons for supposing that the premises they lived in belonged to them. The gravamen of the charge, however, lay in the fact that the defendants published a newspaper in which the Government had been repeatedly criticised. The defendants were convicted and fined 16 francs, and their community was ordered dissolved as illegal. Although the priests appealed from the verdict and the Foreign Office practically promised to prevent the dissolution of the order on account of its mission work in the East, yet Cardinal Richard, who visited the fathers while under trial, was reprimanded by the Prime Minister, and the salaries of 6 bishops who had written letters of sympathy to them were stopped. When the Archbishop of Aix, Mgr. Gouthes-Soulard, who was one of the victims, denounced this act as a piece of spoliation, since the salaries paid by the Government to the clergy under the terms of the concordat are part of the compensation due by the state and accepted by the Church in lieu of the confiscated ecclesiastical property, the contumaciousness of the archbishop, for whose punishment no law existed, caused M. Waldeck-Rousseau to bring in a bill amending the penal code and punishing, without trial, any member of the clergy criticising the Government or any public authority. It was on the face of it so incompatible with all principles of popular liberty that the committee appointed to examine it recommended its abandonment.

A much graver matter, however, was the *loi de scolarité*, introduced in January into the Chamber, the object of which was to kill off the Catholic secondary schools. The bill proposed to make an attendance of three years at a *lycée* condition precedent to admission to such institutions as the Polytechnic, the Naval School, Saumur, Versailles, or Fontainebleau. In other words, if a youth desired to enter a military, naval, or civil service academy, he must have spent three years in a *lycée*. Achievement or excellence acquired elsewhere could not avail him, since it was not so much a point what he learned as where he learned it. The committee to which this bill was referred gave it a rebuff.

These two bills were introduced, however, and with them two others worse than the first, and to the passage of all four the ministry was committed. The third provided for the regulation of religious congregations. Its terms were, briefly, that six months would be allowed for congregations not "regulated" to become so; failing which, their property would be confiscated. The fourth measure presented the other horn of the dilemma. Those already regulated and those who might be driven into regulation by bill No. 3 met a heavy special tax, whose conditions would be certain to drive them into bankruptcy within a short time. None of the bills had been passed when the year closed, in spite of the efforts of the ministry. To inflame the Socialists, M. Waldeck-Rousseau had an inquiry made as to the property of the congregations. The result of the examination showed a total of 1,060,530,630 francs. While this was probably exaggerated for political purposes,

and because the phrase "a milliard of francs" made such a comfortable and impressive mouthful, still the sight of so much wealth at their disposal sharpened the appetites of the Socialists, and made exceedingly probable the passage of one or all of the bills before the session should end.

But what the Government could not accomplish in one way toward injuring and insulting the Catholics of France it could in another, and no reasonable opportunity was neglected. The acts ranged from mere comedy to the height of blasphemy. It had been the immemorial custom of the French navy to lower the flags and deck the vessels with crape on Good Friday. This year a telegram was sent to all the ports in France by the Minister of Marine to forbid the ceremony. M. Waldeck-Rousseau in April issued a ukase forbidding missions and special sermons by religious orders. And following their chiefs, the prefects and mayors joined in the hue and cry. In Tours Hospital the mayor ordered the crucifixes removed from the walls, and prohibited the circulation of any religious book, even a Catholic almanac being confiscated. In St. Florine the mayor issued an order interdicting the wearing of vestments by priests at funerals. Numerous cases of similar petty tyranny were reported, none, however, showing a more luminous conception of law and logic than the following: In Brest, early in February, a man named Jean Bartheleme was seized as he left the Jesuit College, having in his possession several articles which he had stolen from that institution. On his being brought to trial the public prosecutor held that the Jesuits had no legal existence, and that therefore there could be no theft of any articles belonging to them, and the prisoner was discharged.

The Pope in February conferred upon M. Brunetiere the rare distinction of the order of Commander of Pius IX, in return for his signal services to the Catholic religion.

On the third anniversary of the fire which consumed the Charity Bazaar in Paris, May 4, 1897, and in which 115 lives were lost, was consecrated a memorial chapel in the Rue Jean-Goujon. The entire expense of it, 300,000 francs, was contributed by the Countess de Castellane.

By a brief dated Sept. 13, the Pope sent to the Archconfraternity of Our Lady of Compassion, organized for prayer for the conversion of England, his blessing and his hope for success. The extreme Left of the Chamber of Deputies immediately made outcry, saying that it would disturb international relations between England and France. But the affair was not so regarded in Downing Street, where no notice was taken of it.

Between Sept. 10 and 14 a clerical congress was held at Bourges, the first since the Revolution, attended by more than 800 priests.

Archbishop Ireland delivered the address at the unveiling of the statue of Lafayette presented to France by the United States. The ceremony was performed on July 4, and the archbishop's address was a long panegyric on Lafayette, the keynote of which was praise of liberty.

Père Didon, O. S. D., one of the most famous preachers in France, died suddenly in Toulouse, March 10. Other vacancies in the ranks of the clergy were caused by the deaths of Mgr. Mando, Bishop of Angoulême, July 15; of Mgr. Gouthes-Soulard, Archbishop of Aix, Sept. 8; and Mgr. Baptifolier, Bishop of Meude, Oct. 1.

Germany.—A somewhat serious conflict was started in February between the Catholics of Alsace-Lorraine and those of the rest of the empire over the proposed erection of a Catholic faculty of theology at the University of Strasburg. The

question was one partly of educational methods, but more largely of national sentiment, since such a faculty at a thoroughly German university like Strasburg would be a powerful agent in Germanizing the clergy of the two dissident provinces. Counter-petitions were addressed to the Holy See by the Bishops of Strasburg and Metz on the one hand and the Catholic press and clergy of Alsace-Lorraine on the other. At last accounts the advantage was with the German element, represented by the bishops.

The eight hundred and fiftieth anniversary of the translation of the relics of St. Quirinus to Neuss, in the diocese of Cologne, was celebrated with great pomp and enthusiasm by the inhabitants of the town for a week in the middle of May. St. Quirinus is represented as the Roman tribune to whose care the Pope and other Christian captives were intrusted by Hadrian in 119 A. D., and who was converted by the Pope and died in martyrdom with him.

The dancing pilgrims of Echternach this year celebrated their pilgrimage to the shrine of St. Willibrod on Whit-Tuesday. Although the distance traversed was no more than a mile, it took three hours for any part of the troop of over 50,000 persons to traverse it. They dance to music, five steps forward and three back, which considerably lengthens their journey.

The Prussian Minister of Cult in February refused to recognize attendance at Fribourg, in Switzerland, as equal to attendance at German universities—a privilege theretofore accorded all German universities. The discrimination was publicly declared to have been made because Fribourg was under Dominican control.

The forty-seventh annual Catholic Congress of Germany met at Bonn in September, and drew up a number of resolutions, under eight different heads, as the outcome of its discussions. Of these the most important were that calling for the freedom of the Holy See and that outlining a plan for denominational education.

The statistics of the Catholic population of the empire, published in August, showed a falling off of more than 6 per cent. in Baden, about 3 per cent. in Prussia, and a less fraction in the other duchies.

Italy.—Although the feeling between Church and state was not at all modified by any events of the year, the two moved together throughout twelve months with comparatively little friction. The stoppage of a French pilgrimage from Marseilles, ostensibly for quarantine purposes, was probably as much a national demonstration as a religious one. His Holiness, in an informal manner, sent to Queen Margherita the expression of his sympathy and regret at the death of King Humbert. The Queen sent to Mgr. Bonamelli, Bishop of Cremona, a prayer for which she sought ecclesiastical approbation. It was refused, however, on account of its form.

In a letter to the Cardinal Vicar of Rome the Pope protested in August against the proselytizing being carried on in the Holy City by American missionary societies. Although as a reprisal the Liberals proposed removing police protection from occasions of military and official celebration in St. Peter's, the new King promptly prevented any such unwise measure. His Majesty, however, even in his accession proclamation declared his intention of continuing his father's policy of *Roma Intangibile*, or the preservation of the city from the aspirations of the papal see.

Austria-Hungary.—The evil of dueling in the Austrian army was accentuated in August by the trial and dismissal from the army of Marquis Tacoli for refusing to fight a duel. The marqu

had occasion to protest against the utterances of a slanderer, whom military etiquette required him to challenge. He refused to do so on the ground that he as a Catholic objected on principle to dueling. The officers' court of honor thereupon convicted him of cowardice, and the Ministry of War canceled his commission. It developed on the inquiry that another officer had written to the marquis commending his stand. The writer, who turned out to be Captain Ledochowski, a young headquarters officer of distinction, and a nephew of the cardinal prefect of the Propaganda, was also dismissed from the army. The investigation of a second letter of congratulation to the marquis disclosed the fact that it was written by the Infant Don Alfonso de Bourbon. There was no talk of dismissing him from the army, and under the stimulus of his advice and the influence of the personages affected by the two dismissals a movement began for the abolition of compulsory dueling.

Under the direction of Countess Maria Teresa Ledochowski an antislavery congress was held in Vienna, Nov. 22 to 27.

Pope Leo XIII in September addressed a letter to the Archbishop of Salzburg warmly encouraging the project of a Catholic university at that place. Of the 9,000,000 kronen needed for its maintenance 1,000,000 was subscribed during the year, and it was expected that the balance would be raised within five years.

The nine hundredth anniversary of the Church in Hungary was celebrated in August in the Cathedral of Grau, where St. Stephen was baptized and crowned King with a crown sent him by the Pope. The celebration was attended by the Hungarian Premier and all his Cabinet.

Archbishop Julian Kinowski, Uniate Greek Metropolitan of Lemberg, died May 4, aged seventy-four years.

Belgium.—On Sunday, May 25, the new system of elections in Belgium received a fair trial, and resulted in a Catholic majority of 18 members in the Chamber of Representatives and a substantial majority in the Senate. The result in the Chamber represented a decrease from a previous majority of 72, but the better tone prevalent among the minority more than made up for the forfeiture of additional strength by the Catholic party, and justified the workings of the new law.

The Belgian Chamber in April began work on its project for raising the salaries of ecclesiastics of all ranks. The scale proposed ranged from \$160 to \$420 per annum, conditioned on length of service.

The Catholic family of Aremborg, the most illustrious in Belgium, removed entirely during the year to Germany, where it has extended possessions. Its residence in Brussels, the ducal palace built in 1548, where Count Egmont once resided, was sold to the Government. The family is descended from Jean de Ligne (1442), and the heads of it have been counts of the Holy Roman Empire since 1549.

A committee formed in Belgium in November presented an appeal to the Holy Father to condemn anti-Semitism, and especially to dispel the legend of the practice of ritual murders.

Holland.—In the face of a promise of a Government subsidy to Catholic schools, the Liberals refused to allow any appropriation for the purpose, declaring the promise not binding. Mgr. Schaepman, the leader of the Catholic party, was induced by the promise to join the Liberals on the question of compulsory education, and owing to his defection the compulsory school

bill passed by one vote. The law is to come into effect Jan. 1, 1902, when Catholic pupils will be forced to attend the state schools, unless the promised subsidy is made, since their own schools are not large enough for all Catholic pupils who come under the provisions of the law.

Latin America.—The work of revivifying and reorganizing the Church in Latin America, inaugurated by his Holiness by the Plenary Council of Bishops of Latin America held at Rome in 1899, was continued by him throughout the following year. In March the Sacred Congregation for Extraordinary Ecclesiastical Affairs issued a decree to the bishops regulating fasts, and providing for the promulgation of an eighty days' indulgence. In May the secretariate of state by brief conveyed to the bishops the wish of the Holy Father that in each ecclesiastical province a meeting of the ordinaries be held at least as often as once every three years; and asked a strict observance of the enactments of the council, especially the ordinances relating to the conversion of the Indians, the study of the vulgar tongue, the deferring of infant baptisms and negligence in administering the sacraments to the sick. The Pope also sent an apostolic letter to the bishops of Brazil, urging the establishment of ecclesiastical seminaries, the organization of literary mediums to educate the people, an intelligent interest in politics, and proper and systematic provision for the support of Catholic institutions. His Holiness's interest was marked by a great Catholic revival in South American countries. A congress held at Bahia in June was attended by clergy from all parts of the continent, and practical methods were adopted of carrying the Pope's recommendations into effect.

Australia.—The new cathedral at Sydney was dedicated Sept. 9 by Cardinal Moran. In the sanctuary besides the bishops of Australia were Earl Beauchamp, Governor of New South Wales, Lord Lamington, Governor of Queensland, and Mr. Le Hunte, Lieutenant Governor of British New Guinea. The cost of the cathedral was £220,000, and it had been building since 1868. A Catholic congress, lasting six days, was held Sept. 9 to 15, at the initial session of which Lord Beauchamp was present. The site of the new cathedral is that of the first Catholic church in Australia, of which the foundation stone was laid by Gov. Macquarie in 1821.

China.—The outrages in China by the Boxers fell with especial severity upon the Catholics, who were the first victims of the antiforeign fury. That part of this fury, as regards the Catholic priests especially, was due to the anticlerical crusade in France, was asserted by those most familiar with the situation. Lord Curzon, Viceroy of India, who visited Peking in 1894, thus summed up the situation:

"China resents the foreigner at best, and the missionary in any case must take his life as well as his crucifix into his hands. This he well understood. But in aggravation of the normal antiforeign feeling of the Chinese population came the knowledge that France herself had ousted those Jesuits, those orders, whom China was to be made to receive at the mouth of the Mauser, whom China herself was forbidden to eject. The castaways of a European country were to be her enforced guests—the refuse of France was to be made welcome by the stranger. Insult was thus added to the injury of the intrusion. The nation could not draw subtle distinctions; it had the plain fact before it that the soul physicians France would not permit to practice on its own people were to be thrust upon the devotees of another

creed; that the men whom France accused of treachery to the state were to be let loose on a Government to whom no loyalty was owed. This is the deed that France has done; and the horrors of to-day, in which we and the other countries of Europe suffer an undue share, are but the sequel of the expulsion of religious orders from the republic."

The number of Catholic priests and bishops who fell before the Boxers had not been counted at the end of the year, and the number of native Christians who perished can only be guessed at. Among the more prominent victims were Right Rev. Laurence Guillon, Vicar Apostolic of South Manchuria; Bishop Ferdinand Hamer, Vicar Apostolic of Southwest Mongolia; Bishop Fantasoti, Vicar Apostolic of South Hunan; Bishop Gregory Grassi, Vicar Apostolic of North Shensi; and Bishop Francis Fogolla. The known massacres included 32 European priests and 10 nuns. Much missionary property was destroyed, including the Peking cathedral. The Catholics in China before the outrages numbered 762,758, with 942 European and 445 native priests, 4,348 churches and chapels, and 4,054 schools with 65,990 pupils.

Other Missionary Countries.—Leo XIII. on Feb. 5, gave 500,000 francs for the Church of the Copts in Egypt, and on the same day he made a similar gift on behalf of the provincial seminary at Kandy in Ceylon.

The Uniate Chaldean Church of Mesopotamia received a new head by the election, July 8, of Mar Joseph Emmanuel Thomas, Bishop of Seert, to the vacant patriarchal throne of Babylon, which embraces 3 archbishoprics and 9 bishoprics situated in Asiatic Turkey and Persia.

On May 13 was solemnly consecrated the Basilica newly erected upon the site of the one built near Jerusalem by the Empress Eudoxia in the fifth century to mark the spot where St. Stephen was stoned to death.

By a decree issued in June, and signed by the Viceroy of Szechuen, the first and second chiefs of Bathang, and the superior of the lamasery of Tin-Lin-Se, the door of Tibet, which has long been closed to Christianity, was opened to missionaries. By the decree, which was engraved on wood, the natives are not only allowed to become Christians, but are freed from any taxation in support of the national religion.

The work of reunion among the schismatics of the East received great impulse from the reconciliation of the Armenian Vicar General of Tauris, who was followed into the Church by 6 entire villages and more than 1,800 families.

A Eucharistic Congress was held at Goa, in Portuguese India, the second week in December, and was attended by all the Catholic bishops of the Indian hierarchy, as guests of the Queen of Portugal. The chief subject taken up was the condition of Catholics in Mysore, Cochin, and Travancore. In these states all Christians are considered civilly dead, and their property confiscated. The matter had been previously laid before the Viceroy of India both by the native Christians of Madras and the ruler of Mysore, who proposed to abolish the law. The Viceroy, however, refused to allow the repeal of the law, because, as he said, the number of persons concerned was infinitesimal, and that they were of humble station and possessed but little property. To the first point in Lord Curzon's reply, the bishops answered that the native Christians numbered a fourth of the population; to the second they pointed out the obvious injustice of expecting persons civilly dead and deprived of their property to be either wealthy or proud, a condi-

tion precedent, apparently, to their receiving any attention from the Viceroy. They also called to his notice that one poor Christian was as much entitled to the protection of the law as a million wealthy ones. Failing to obtain any redress from him, they presented the matter to the Crown.

ROOSEVELT, THEODORE, twenty-fifth Vice-President of the United States, born in New York city, Oct. 27, 1858. His father, also named Theodore, a merchant and philanthropist, was of Knickerbocker stock, and his mother was a descendant of Archibald Bulloch, the first President of Georgia in the Revolution. Their son was a sickly boy, but rigid discipline and systematic exercise brought him vigorous strength. He was prepared for college in private schools, and was graduated at Harvard in 1880. After traveling in Europe he began the study of law, but abandoned it for politics. In 1881 he was elected by the Republicans to the Assembly from the Twenty-first District of New York city, and was twice re-elected. The first two Legislatures in which he sat were Democratic. In his second year he was leader of the minority in the Cities Committee, and he became its chairman in the Republican Legislature of 1884, after being an unsuccessful candidate for Speaker. He was active in promoting the passage of the first New York civil service laws, was chairman of a committee that investigated abuses in New York city, and secured acts abolishing the fee system in county offices and depriving the aldermen of veto power over the mayor's appointments. He favored a bill reducing elevated railroad fares, but when Gov. Cleveland vetoed it he sustained the veto.

After retiring from the Legislature he bought a ranch in North Dakota, being an enthusiastic sportsman, and for many years he has spent his vacations in hunting trips.

In 1884 he was a delegate at large to the Republican National Convention, where he advocated the nomination of George F. Edmunds, but he supported Mr. Blaine in the campaign. The Republicans nominated him for mayor of New York in 1886 against Henry George, the United Labor candidate, and Abram S. Hewitt, the Democratic candidate, who was elected. President Harrison appointed him a civil service commissioner in 1889. He served efficiently until May, 1895, when he resigned, and became president of the New York city Board of Police Commissioners in the administration of Mayor Strong. He established a policy of strict enforcement of liquor and Sunday laws, and this aroused much opposition, but it stopped police protection of vice and restored discipline to the force.

Mr. Roosevelt was appointed Assistant Secre-

tary of the Navy in April, 1897, and took an important part in the preparations for the Spanish War. At the outbreak of hostilities he resigned his office and raised, largely among the Western cowboys, one regiment of the volunteer cavalry, who were known as Rough Riders. He became lieutenant colonel, with Dr. Leonard Wood, of the regular army, in command. From 1884 to 1888 he had been a member of the Eighth Regiment, National Guard of New York. The Rough Riders (unmounted) were with the army before Santiago, and took part in the fight at Las Guasimas, June 24, 1898, and in the capture of San Juan Hill on July 1. Col. Wood was pro-



THEODORE ROOSEVELT.

moted brigadier general on July 8, and Lieut.-Col. Roosevelt became colonel. He was mentioned in the reports for gallant conduct in battle, and was distinguished for care of his men in camp.

After the surrender of Santiago the troops were ordered to the mountains because of yellow fever. Col. Roosevelt participated in the preparation of a round robin by the officers, demanding that all except the immune regiments be brought home at once. This was sent to the Secretary of War, and was also given to the press. Secretary Alger then ordered the troops home, at the same time forbade unauthorized publication of reports, and retaliated on Col. Roosevelt by publishing a letter from him asking that the Rough Riders be

taken with the regulars to Porto Rico because they were "as good as any regulars, and three times as good as any State troops" that were "armed with black powder, Springfields, or other archaic weapons." The Secretary likewise published his own reply: "I suggest that, unless you want to spoil the effects and glory of your victory, you make no invidious comparisons." This was considered an attempt to prejudice the National Guardsmen against the colonel, and was used in subsequent political campaigns. The letter was generally interpreted, however, not as a reflection on the volunteer soldiers, but merely as an impulsive statement of the truth concerning the comparative inefficiency of the weapons with which they were armed.

Col. Roosevelt returned with his regiment to Montauk Point in August, 1898, was nominated for Governor of New York by the Republicans at Saratoga, Sept. 27, 1898, and was elected for the two years' term beginning Jan. 1, 1899, by a plurality of 17,786 over Augustus Van Wyck, Democrat. As Governor he reformed the administration of the canals, favored the enactment of an improved civil service law, and applied the merit system in county offices. By a special message he induced the Legislature of 1899, at the end of the session, to pass an act taxing as real estate the value of railroad and other franchises to use public streets. Corporations and Republican leaders protested, but the Governor said he would sign it as it stood unless they could improve it without destroying its essential features. He called an extra session of the Legislature, secured the passage of the bill in modified form, and established the principle of street-franchise taxation.

Columbia University made Gov. Roosevelt a doctor of laws in 1899. Early in 1900 he was mentioned for Vice-President, but he desired a second term as Governor, and repeatedly announced that under no circumstances would he accept the vice-presidency. The New York party leaders, however, did not want him to be a candidate again for Governor, and, though pledged to respect his wishes, they joined Western delegates who were enthusiastic over Gov. Roosevelt's military record, and at the Philadelphia convention on June 21, 1900, forced him to accept the nomination for Vice-President. He made an extended speaking tour through the Western States, and was elected for the term beginning March 4, 1901, receiving 292 electoral votes, while 155 were cast for Adlai E. Stevenson, the Democratic candidate.

In 1882 Mr. Roosevelt published a Naval History of 1812. This was followed by *Hunting Trips of a Ranchman*, in 1885; a *Life of Thomas H. Benton*, in 1886, and a *Life of Gouverneur Morris*, in 1887, both in the *American Statesmen Series*; and in 1888 by *Essays in Practical Politics and Ranch Life and Hunting Trail*. The first two volumes of his most important work, *The Winning of the West*, were issued in 1889. In 1890 he wrote a *History of New York City*, for the *Historic Towns Series*; in 1893, *The Wilderness Hunter*; and the next year published the third volume of *The Winning of the West*. In 1897 he collected a volume of essays entitled *American Ideals*, which he followed with *The Rough Riders* in 1899, and *Oliver Cromwell* and a volume of addresses entitled *The Strenuous Life*, in 1900. He is also the author, in collaboration with Henry Cabot Lodge, of *Hero Tales from American History*, and he was one of the assistants of William Laird Clowes in the preparation of *The Royal Navy*.

ROUMANIA, a kingdom in eastern Europe. The legislative power is vested in a Senate of 120 members, of whom 109 are elected by two classes of property holders, 2 by the universities, 8 are bishops, and 1 is the heir to the throne, and a Chamber of Deputies, containing 183 members, elected for four years by all taxpayers, divided into three classes. The reigning King is Carol I, born April 20, 1830, a son of Prince Karl of Hohenzollern-Sigmaringen, elected Domn of Roumania in 1886, and proclaimed King on March 26, 1881. The Cabinet, constituted April 23, 1899, was composed in the beginning of 1900 as follows: President of the Council and Minister of the Interior, George Cantacuzene; Minister of Finance, Gen. G. Mano; Minister of War, Gen. Jacob Lahovary; Minister of Education, Take Jonesco; Minister of Justice, C. G. Dicesco; Minister of Agriculture, Industry, Commerce, and Domains, N. Fleva; Minister of Foreign Affairs, J. N. Lahovary; Minister of Public Works, Dr. C. I. Istrati.

Area and Population.—The area of Roumania is 48,307 square miles, with a population of 5,800,000, including 200,000 in the Dobrudja. The people of Roumanian race number about 4,950,000 in the old provinces of Wallachia and Moldavia and 90,000 in the Dobrudja. There are about 300,000 Jews, 200,000 gypsies, 50,000 Bulgarians, 38,000 Austrians, 20,000 Germans, 20,000 Greeks, 15,000 Armenians, and 7,000 French, Hungarians, English, Italians, Turks, Poles, and others in the original provinces, and 40,000 Bulgarians, 30,000 Turks, 20,000 Russian sectarians, 10,000 Greeks, 4,000 Jews, 3,000 Germans, and 3,000 others in the Dobrudja. Education is free and is compulsory where schools exist, but for the rural population there are not half enough schools. The rural primary schools had 4,078 teachers and 220,420 scholars in 1897, the urban schools 1,333 teachers and 77,863 scholars, including 15,659 in private schools. There are 8 normal schools, with 770 students; 52 secondary and high schools, with 1,143 teachers and 18,969 pupils; and the universities of Bucharest and Jassy, with 110 professors and 1,650 students. The state maintains besides special schools for agriculture, engineering, etc. The sum appropriated for primary instruction in 1896 was 9,140,527 lei, and for secondary instruction 5,970,942 lei.

Finances.—The revenue for the year ending March 31, 1899, was 221,935,617 lei, and the expenditure 206,042,202 lei. For the financial year 1900 the estimates were 228,376,000 lei of revenue and of expenditure. For the year ending March 31, 1901, the budget estimate of revenue is 242,599,000 lei, of which 41,450,000 lei are derived from direct taxes, 76,260,000 lei from indirect taxes, 55,260,000 lei from state monopolies, 23,772,000 lei from the Ministry of Agriculture, Industry, Commerce, and Domains, 16,492,000 lei from the Ministry of Public Works, 11,385,000 lei from the Ministry of the Interior, 4,690,000 lei from the Ministry of Finance, 1,113,000 lei from the Ministry of War, 260,000 lei from the Ministry of Instruction and Worship, 286,000 lei from the Ministry of Foreign Affairs, 421,000 lei from the Ministry of Justice, and 11,200,000 lei from various sources. The estimate of expenditure for 1901 is also 242,599,000 lei, of which 91,933,592 lei are for the public debt, 71,300 lei for the Council of Ministers, 50,240,609 lei for the Ministry of War, 29,446,792 lei for the Ministry of Finance, 30,900,374 lei for the Ministry of Worship and Public Instruction, 19,556,785 lei for the Ministry of the Interior, 5,300,000 lei for the Ministry of Public Works, 8,716,056 lei for the Ministry of Justice, 5,043,388 lei for the Ministry of Agriculture, Industry, Com-

merce, and Domains, 1,816,200 lei for the Ministry of Foreign Affairs, and 1,573,900 lei for supplementary credits.

The public debt on Dec. 1, 1899, amounted to 1,280,719,683 lei, more than half of it borrowed for railroads and other public works, and the remainder for purchasing lands for the peasantry, reducing unfunded debt, and covering deficiencies of revenue. A loan of 175,000,000 lei was issued at 5 per cent. in November, 1899, to construct additional railroads and public works.

The Army and Navy.—The permanent army has a peace strength of 3,280 officers and 60,000 men, with 11,930 horses and 390 guns. The period of service is three years in active service and seven years in the reserve, and Roumanians who are not drawn at the age of twenty to serve in it are members of the territorial army for five years, or four years in the cavalry, and then of the territorial army reserve until they are thirty years old. The strength of the territorial army is 72,000 men on a peace footing, and its war strength 3,943 officers and 168,000 men, with 36,604 horses. After the age of thirty all belong to the militia for five years, and then for ten years to the *glota*, or general levy. The infantry weapon is the Mannlicher rifle of the model of 1893.

The naval force of Roumania consists now of a protected cruiser, a training brig, 7 gunboats, 6 coast guards, a dispatch steamer, and 6 first-class and 2 second-class torpedo boats. Additional gunboats will be built in a floating dock brought from Scotland, and 2 armor-clad vessels are projected.

Commerce and Production.—The yield of wheat in 1899 was only 9,184,930 hectolitres on 1,661,360 hectares, against 20,600,100 hectolitres on 1,453,600 hectares in 1898. The production of rye in 1899 was 700,700 hectolitres; of barley, 1,600,920 hectolitres; of oats, 2,204,410 hectolitres. The production of maize in 1898 was 35,912,000 hectolitres, from 2,120,070 hectares; of plums, 929,320 hectolitres were produced in 1898; of wine, 517,280 hectolitres; of tobacco, 25,500 quintals; of colza, 123,150 hectolitres; of flaxseed, 238,135 hectolitres; of hemp, 62,130 hectolitres; of hay, 13,947,250 quintals. The state lands sold from 1868 down to 1896 were 571,518 hectares in extent, valued at 210,130,000 lei. The state forests cover 931,727 hectares, and produce a gross income of 2,338,000 lei. The general trade of Roumania in 1898 was 389,908,439 lei for imports and 283,181,567 lei for exports.

The European Commission of the Danube.—The Danubian Commission, created in 1856 and composed of delegates of Germany, England, Austria-Hungary, France, Italy, Roumania, Russia, and Turkey, has power to collect tolls from vessels navigating the Danube below Braila, and to apply them to improving the navigation of the river. The dredging operations at the Sulina mouth deepened the water over the bar from 20½ feet in 1890 to 24 feet in 1895, so that in 1899 only 2 vessels had to complete loading out in the roadstead, against 142 in 1894. The cutting through one of the loops of the great double bend of the river near the mouth was finished in 1894; in 1897 a channel was thrown open, straightening the river farther up; in 1898 still another cutting was completed, and the dredging of a channel through Lake Obsetin was then begun, and will be completed in 1902. This will make the river from Sulina up to Tulcha almost as straight as a canal. The depth of water in the channel has not only been maintained, but improved by means of groins, and the danger of the formation of banks in the Sulina channel is thereby reduced to a minimum.

Exodus of Roumanian Jews.—The education law of 1893 barring Jews from the public schools is the most serious of the disabilities that the Roumanian Government has imposed upon the Jewish race, but it is only one of the political, social, and economical wrongs that make life for the Roumanian Hebrew difficult and bitter in the best of times, and almost impossible in a period of commercial and industrial depression such as was caused in 1900 by the failure of harvests in the previous year. The Jews of Roumania must serve in the army and bear all other civic burdens. They are of Roumanian nationality before the law, and yet are aliens, foreigners by law though born in the land, capable of acquiring citizenship only by naturalization, which is generally denied to them. They have been driven out of all the honorable professions, excluded from industries, and refused the right of living in the rural districts and earning their support by agriculture. As a corollary to their civic ostracism they have frequently been assailed by riotous bands of students and workmen, reviled with incendiary violence by the press, and subjected to the insults and menaces of the Anti-Semitic League, which has branches in all towns and has organized an anti-Jewish crusade all over the country. An article in the Berlin Treaty expressly provided against the discriminations that have been laid upon the Jews by declaring that "in Roumania the difference of religious creeds and confessions shall not be alleged against any person as a ground for exclusion or incapacity in matters relating to the enjoyment of civil and political rights, admission to public employments, functions, and honors, or the exercise of the various professions or industries in any locality whatsoever." The only step that has been taken toward compliance with the treaty is a modification of the article of the Roumanian Constitution that made naturalization inaccessible to Jews. The new naturalization law, instead of declaring the general enfranchisement of native Jews, requires an individual application from every Jew, and attaches onerous conditions and formalities to such applications, and even when these have been fulfilled the Legislature almost invariably rejects them, only 100 Jews, members of wealthy families, having succeeded in obtaining the rights of citizenship since 800 Jewish soldiers were naturalized after Plevna by a single act. Even then the naturalization is only personal, so that the children of the 900 Jewish citizens of Roumania are aliens in the sight of the law. In the schools 3,000 Jewish children are admitted upon the payment of fees, from which all Roumanians are exempt. This is only a tenth of the children of school age among the Jews, and the Jewish private schools that have been founded in many parts of the country are hampered in every way. They are supported mainly by the voluntary tax paid by Jews on meat slaughtered according to the ritual, the *gabella*, which the Roumanian Government has attempted to suppress on the pretext that the Jewish method of slaughtering animals is inhumane. From the normal and the professional and art schools the Jews are excluded, and in the universities, by a new law for aliens, which means Jews, for Christian foreigners can obtain naturalization without hindrance, the fees, especially in the medical faculty, have been fixed at prohibitive rates. Though Jews must perform military service in the ranks like other Roumanians, they can not receive commissions nor serve as one-year volunteers. No Jew can hold a post in the hospitals, nor an office on a Roumanian railroad, nor practice as a lawyer, an architect, a veterinary surgeon, or an apothecary, nor take part in the direction of

the schools or universities, nor belong to the Chamber of Commerce, nor be employed in the national bank. From all offices in the Government civil services Jews are of course excluded. No Jew may sell tobacco or salt. The hawking law of 1884 has been enforced year by year with more rigor, and 20,000 Jews affected by it have been reduced to starvation. Under a series of vagrant acts applied oppressively to Jews they have been expelled from rural districts and compelled to settle in the congested towns. An identical note was presented in 1880 by England, France, and Germany protesting against the requirement of individual naturalization from persons belonging to a non-Christian creed domiciled in Roumania and not belonging to any foreign nationality as an evasion of the Treaty of Berlin. No attention was paid to this representation. The acts of the Government and the treatment of the people became harsher and more oppressive. In 1897 came the anti-Jewish riots and charges of ritualistic murder, which were followed by the excesses of the Bucharest mob in December, 1898, and anti-Semitic disturbances in Jassy in May, 1899. Apologists for the Roumanian Government argued that the injustice and persecutions could not be as severe as they seemed because the Jews did not leave the country. The famine and business stagnation of 1900 suddenly impressed masses of the Jewish population with a feverish desire to escape from Roumania at any risk and cost. The constantly growing Anti-Semitic League bound its members to give no employment to Jews nor to have business dealings with them. In the severe winter of 1898 the Government gave generous aid to the destitute and famishing peasantry, while the poor Jews had to depend only on the charity of their richer brethren. Some of the townspeople in Moldavia started emigration societies during the winter, and the movement spread over the whole kingdom. The emigrants started out in bands, some without money, some on foot, to seek new homes under benignant conditions. One stream of emigration was directed to Anatolia, one to Cyprus, another to Canada, the greatest to the United States. About 16,000 left their homes in the first half of 1900. In passing through Austria-Hungary they camped in the open air, being unable to pay for the poorest lodgings. The exodus grew to such proportions that the Roumanian authorities tried to stay it by refusing to give passes to intending emigrants unless they signed a declaration stating that they were vagrants without the means of subsistence. Next the Austro-Hungarian authorities, driven to take precautionary measures, informed the Roumanian Government that Jewish emigrants not provided with railroad tickets to Hamburg, Paris, or London would not be permitted to pass the frontier; consequently the Roumanian authorities refused to grant a pass to anybody who could not produce such a ticket. The first of the bands started out from the town of Berlad and tramped through the country, endeavoring to beg enough money to carry them to their new home. Similar societies sprang up in Jassy, Botoshani, Roman, Bucharest, Bacan, and soon in every town and village where there was a considerable Jewish laboring population. All were sworn to leave Roumania forever. Professional men, the trading class, and skilled laborers turned their eyes to the United States. Those who placed less reliance on their individual ability were drawn toward Canada by the offer of 100 acres of Government land. The very efforts of the Roumanian police to stop the exodus served to rouse the desire among many who had no cause to leave on their own account to join the flight of their coreligionists. The restless, the thriftless,

the idle, and the vicious joined the movement. When the first groups of exiles arrived in New York, nearly the whole of them were barred by the law against pauper immigration, and were detained. Some were released on the undertaking of some of their American coreligionists to provide settlements for them and guard against their becoming a burden on the community. Representations were made to the Government of Roumania, which was informed that immigrants arriving with no means of subsistence would be returned to the country whence they came. Later an agent of the Treasury Department was dispatched to Roumania to investigate the condition of intending Jewish emigrants to North America, both those whose declared destination was the United States and those who took passage for Canada and were likely to cross over into the United States after arriving in that country. The Dominion Government, when the stream began to pour into Canada, announced that it would receive no more Roumanian immigrants unless they possessed the means of establishing themselves. The Austro-Hungarian Government therefore refused to let any more pass the border, and posted troops on the Hungarian frontier to keep them back. There were 1,000 in Hungary and 2,000 in Vienna who were sent back to Roumania. When the last ones who had entered Hungary were escorted back to the border the Roumanian authorities refused to readmit them, and they endured great hardships and privations while the officials of the two countries were quarreling about their status.

Political Affairs.—The Conservative and the Constitutional parties having united, placing the ministry in a minority, the Cantacuzene Cabinet resigned in a body on July 17, and M. Carp was charged by the King with the formation of a Conservative coalition ministry. It was composed of four Junimists and four members of the retiring ministerial party. Minister Ionesco, in order to raise money to pay the coupons of the public debt next falling due, planned to sell to the national bank the shares of its capital owned by the Government. The hard conditions demanded by the bank directory before completing the transaction were not liked in influential Conservative circles. The new Cabinet was constituted on July 19 as follows: President of the Council and Minister of Finance, Carp; Minister of the Interior, Onulesco; Minister of Foreign Affairs, Margiloman; Minister of Agriculture and Domains, Filipesco; Minister of Justice, Majoresco; Minister of Education, Arion; Minister of War, Gen. Lahovary; Minister of Public Works, Jonel Gradisteano. The fusion Cabinet had to deal with the serious international dispute arising out of the murder of Prof. Mihaileano at Bucharest and the terrorism to which Roumanians in Sofia were subjected by the Macedonian Revolutionary Committee because of the interest taken by the Roumanian Government and expressed by Roumanian publicists in the Wallachian race in Turkey and the preservation of their nationality and language. The Roumanian colony in Sofia is composed of wealthy Macedonian merchants, most of whom have become naturalized Roumanian citizens. They were naturally in sympathy with the Roumanian national movement in Macedonia and opposed to the plans of the revolutionary Bulgarians, who aimed to annex Macedonia to Bulgaria and would recognize no nationality there except their own. When these Roumanian citizens of Macedonian origin declined to contribute money for the agitation of the Macedonian Committee they were first threatened, then some of them were assassinated, and one of their leaders was kidnaped and put to torture, while an-

other escaped and took refuge in Bucharest. Those who remained, intimidated now, paid the blackmail, amounting to 200,000 francs. The murderer of Prof. Mihaileano was encouraged to do the deed by the president of the Macedonian Committee, a retired officer of the Bulgarian army. The distrust of Roumania and Bulgaria one for the other began with the reassertion of Russian influence in Bulgaria after the fall of Stambuloff in 1894 and the gravitation of Roumania toward Austria. The activity of the Bulgarian propaganda in the Dobrudja caused the dismissal of some Bulgarian schoolmasters, and impelled the Roumanian Government to build a strategic bridge over the Danube at Tchernavoda.

When the Macedonian Committee first made demands on the Roumanian citizens resident at Sofia for contributions under penalty of assassination the Roumanian agent at Sofia made representations to the Bulgarian Government without any satisfactory result. A Roumanian notable named Flava was shot and wounded on June 16, 1900, by a revolutionary journalist, and this led the Roumanian Minister of Foreign Affairs to address a strong note to the Prime Minister at Sofia. The Roumanians in Sofia decided to pay the contribution of 30,000 francs demanded at that time, upon which the Roumanian minister sent another note demanding the prosecution of the members of the Macedonian Committee for blackmail. The murder of a Bulgarian named Fitoffski in Bucharest by a man, who was dispatched from Sofia for the purpose, the murdered man having been suspected of being a Turkish spy, had placed the Roumanian Government in possession of documentary evidence against the heads of the Revolutionary Committee in Sofia. The murderer confessed that Trifanoff, the president of the Bucharest branch of the Macedonian Committee, had pointed out the man to be struck down, and in their search the police found letters of Sarafoff in connection with the affair. The murder of Prof. Mihaileano, who was a Macedonian by birth, as was also his murderer, occurred on July 22. The confessions of Trifanoff and of Dimitroff furnished additional evidence against the members of the Central Committee, one of whom was an uncle of Dimitroff. The Roumanian Government therefore renewed its demand for the arrest and trial of the directors of the committee—Sarafoff, Kovacheff, and Davidoff—all former Bulgarian officers, although no reply had yet been received to the previous communication. In reply to the remonstrances of the Roumanian minister, the Bulgarian Premier Ivanchoff declared that he could not take action against accused persons until the evidence on which to prosecute was in his hands. The Roumanian Government supposed this to mean that the Bulgarian Government would do nothing until the Roumanian courts had established the guilt of the accused, and became more urgent in its demands. The dispatch of troops from both sides to the frontier followed, but shortly they were withdrawn when satisfactory explanations were given.

The deficit in the budget was found to be 43,000,000 lei. Arrears of taxes could not be collected. Although the harvest was fair, it fell below expectations, and nearly every branch of the revenue declined. The Government proposed to sell the cigarette paper monopoly to Berlin bankers for 15,000,000 lei, petroleum rights in the western Carpathians for 10,000,000 lei, the Government shares in the national bank for 13,000,000 lei, and a part of the state forests for 5,000,000 lei. These proposals were vigorously assailed by the Opposition. In the autumn a peasant uprising in oppo-

sition to the new taxation occurred in the Ranniku and Busoe districts, and in taking possession of Pirkoff the troops killed one peasant and wounded several after three officers and some of the soldiers were wounded. The regular session of Parliament was opened on Nov. 28. Economy was promised, but without any reduction in the army.

RUSKIN, JOHN, an English author, born in London, Feb. 8, 1819; died in Coniston, England, Jan. 20, 1900. He was the only son of a prosperous wine merchant, from whom he inherited a large fortune, and upon whose tombstone the son was justified in writing, as he did, "An entirely honest merchant." Of his father, Ruskin writes in *Præterita*, his autobiography: "My father was a dark-eyed, brilliantly active, and sensitive youth. He had learned Latin thoroughly, though with no large range of reading, under the noble traditions of Adams at the High School of Edinburgh; while, by the then living and universal influence of Sir Walter Scott, every scene of his native city was exalted in his imagination by the purest poetry and the proudest history that ever hallowed or haunted the streets and rocks of a brightly inhabited capital." Of his mother he says: "I do not know for what reason, or under what conditions, my mother went to live with my Scottish grandfather and grandmother, first at Edinburgh, and then at the house of Bower's Well, on the slope of the hill of Kinnoul, above Perth; but certainly the change for her was into a higher sphere of society—that of real, though sometimes eccentric and frequently poor, gentlemen and gentlewomen. She must then have been rapidly growing into a tall, handsome, and finely made girl, with a beautiful, mild firmness of expression; a faultless and accomplished housekeeper, and a natural, essential, unassailable, yet inoffensive pride. I never heard a single word of any sentiment, accident, admiration, or affection disturbing the serene tenor of her Scottish stewardship; yet I noticed that she never spoke without some slight shyness before my father, nor without some pleasure to other people, of Dr. Thomas Brown." He says: "That the Professor of Moral Philosophy was a frequent guest at my grandmother's tea table, and fond of benignantly arguing with Miss Margaret, is evidence enough of the position she held in Edinburgh circles. The frank and cousinly relation went on without a thought on either side of closer ties until my father, at two or three and twenty, after various apprenticeships in London, was going finally to begin his career in his own business. By that time he had made up his mind that Margaret, though not in the least an ideal heroine to him, was quite the best sort of person he could have for a wife, the rather as they were already so well used to each other; and in a quiet, but resolute enough way, asked her if she were of the same mind, and would wait until he had an independence to offer her. His early tresser consented with frankly confessed joy. On these terms the engagement lasted nine years, at the end of which time, my grandfather's debts having all been paid and my father established in a business gradually increasing, the now not very young people were married in Perth one evening after supper, the servants of the house having no suspicion of the event until John and Margaret drove away together next morning to Edinburgh. In looking back to my past thoughts and ways, nothing astonishes me more than my want of curiosity about all these matters; and that, often and often as my mother used to tell with complacency the story of this carefully secret marriage. I never asked, 'But, mother, why so secret when it was just what all the friends of both of

you so long expected, and what all your best friends so heartily wished?' My reason for telling this in this place was chiefly to explain how my mother obtained her perfect skill in English reading, through the hard efforts which, through years of waiting, she made to efface the faults and supply the defects of her early education; effort which was aided and directed unerringly by her natural—for its intensity I might justly call it supernatural—purity of heart and conduct, leading her always to take most delight in the right and clear language which only can relate lovely things. Her unquestioning evangelical faith in the literal truth of the Bible placed me, as soon as I could perceive or think, in the presence of an unseen world, and set my active analytic power early to work on the questions of conscience, free will, and responsibility, which are easily determined in days of innocence, but are approached too often with prejudice, and always with disadvantage, after men become stupefied by the opinions or tainted by the sins of the outer world; while the gloom, and even terror, with which the restrictions of the Sunday, and the doctrines of the Pilgrim's Progress, the Holy War, and Quarles's Emblems oppressed the seventh part of my time was useful to me as the only form of vexation I was called on to endure, and redeemed by the otherwise uninterrupted cheerfulness and tranquillity of a household wherein the common ways were all pleasantness, and its single and strait path of perfect peace.

"Of our neighbors we saw nothing, with one exception. They were for the most part well-to-do London tradesmen of the better class, who had little sympathy with my mother's old-fashioned ways, and none with my father's romantic sentiment. The routine of my childish days became fixed, as of the sunrise and sunset to a nestling. It may seem singular to many of my readers that I remember with most pleasure the time when it was most regular and most solitary. Great part of my acute perception and deep feeling of the beauty of architecture and scenery abroad was owing to the well-formed habit of narrowing myself to happiness within the four brick walls of our 50-by-100 yards of garden, and accepting with resignation the æsthetic external surroundings of a London suburb, and yet more of a London chapel—an oblong, flat-ceiled barn, lighted by windows with semicircular heads, brick-arched, filled by small-paned glass held by iron bars, like fine-threaded halves of cobwebs, galleries propped on iron pipes up both sides, pews well shut in, each of them, by partitions of plain deal, and neatly brass-latched deal doors, filling the barn floor, all but its lateral, straw-matted passages; pulpit sublimely isolated, central from sides and clear of altar rails at end; a stout, four-legged box of well-grained wainscot, high as the level of the front galleries and decorated with a cushion of crimson velvet, padded 6 inches thick, with gold tassels at the corners, which was a great resource to me when I was tired of the sermon, because I liked watching the rich color of the folds and creases that came in it when the clergyman thumped it. Imagine the change between one Sunday and the next, from the morning service in this building attended by the families of the small shopkeepers of the Walworth Road in their Sunday trimmings; our plumber's wife, fat, good, sensible Mrs. Goad, sat in the pew next in front of us, sternly sensitive to the interruption of her devotion by our late arrivals—fancy the change from this to high mass in Rouen cathedral, its nave filled by the white-capped peasantry of half Normandy. Nor was the contrast less enchanting

or marvelous between the street architecture familiar to my eyes and that of Flanders and Italy. The reader may by effort, though still dimly, conceive the effect on my imagination of the fantastic gables of Ghent and orange-scented cortices of Genoa. I can scarcely account to myself for the undimmed tranquillity of pleasure with which, after these infinite excitements of travel in foreign lands, my father would return to his desk opposite the brick wall of the brewery, and I to my niche behind the drawing-room chimneypiece. The sick thrill of pleasure through all the brain and heart with which, after even so much as a month or two of absence, I used to catch the first sight of the ridge of Herne Hill, and watch for every turn of the well-known road and every branch of the familiar trees, was, though not so deep or overwhelming, more intimately and vitally powerful than the brightest passions of joy in strange lands, or even in the unaccustomed scenery of my own. To my mother, her ordinary household cares, her reading with Mary and me, her chance of a chat with Mrs. Gray, and the unperturbed preparation for my father's return, and for the quiet evening, were more than all the splendors or wonders between poles and equators.

"I think it must have been early in 1832 that my father, noticing with great respect the conduct of all matters in the Fall family, wrote Mr. Fall a courteous request that 'the two boys' might pursue their holiday tasks together. Richard Fall was entirely good-humored, sensible, and practical, but had no particular tastes; a dislike, if anything, for my styles of art and poetry. He stiffly declined arbitration on the merits of my compositions; took rather the position of putting up with me than of pride in his privilege of acquaintance with a rising author. He was never unkind or sarcastic, but laughed me inexorably out of writing bad English for rhyme's sake or demonstrable nonsense either in prose or rhyme. We got gradually accustomed to be together, and far on into life were glad when any chance brought us together again.

"The year 1834 passed innocuously enough, but with little profit, in the quadripartite industries before described, followed for my own pleasure—with minglings of sapless effort in the classics, in which I neither felt nor foresaw the least good. Innocuously enough, I say—meaning with as little mischief as a well-intentioned boy, virtually masterless, could suffer from having all his own way, and daily confirming himself in the serious impression that his own way was always the best. I can not analyze the mixed good and evil in the third-rate literature which I preferred to the Latin classics. My volume of *The Forget-Me-Not*, which gave me that precious engraving of Verona (curiously also another by Prout, of St. Mark's in Venice), was somewhat above the general caste of annuals in its quality of letterpress, and contained three stories—*The Red-nosed Lieutenant*, by Rev. George Croly; *Hans in Kelder*, by the author of *Chronicles of London Bridge*; and *The Comet*, by Henry Neele, Esq.—which were in their several ways extremely impressive to me. The partly childish, partly dull, or even idiotic way I had of staring at the same things all day long carried itself out in reading, so that I could read the same things all the year round.

"I do not know when my father began to read Byron to me, all primary training, after the *Iliad*, having been in Scott; but it must have been about the beginning of the 'teen period, else I should recollect the first effect of it. Manfred, evidently, I had got at, like Macbeth, for the sake of the witches. Various questionable changes were made,

however, at that 1831 turning of twelve, in the hermitage discipline of Herne Hill. I was allowed to taste wine, taken to the theater, and on festive days even dined with my father and mother at four; and it was then, generally at dessert, that my father would read the *Noctes Ambrosianæ* regularly when they came out, and at last the shipwreck in *Don Juan*, of which, finding me highly appreciative, my father went on with nearly all the rest. By the end of 1834 I knew my Byron pretty well. After taking me at least six times straight through the Bible, my mother was not afraid of plain words to or for me; she had as much sympathy with all that is noble and beautiful in Byron as my father himself; her Puritanism was clear enough in common sense to see that, while Shakespeare and Burns lay open on the table all day, there was no reason for much mystery with Byron, though until later I was not allowed to read him for myself. I never got the slightest harm from Byron; what harm came to me was from the facts of life and from books of a baser kind, including a wide range of works of authors popularly considered extremely instructive—from Victor Hugo down to Doctor Watts. I said that my mother was an 'inoffensive prude.' She was herself as strict as Alice Bridgenorth, but she understood the doctrine of the religion she had learned, and without ostentatiously calling herself a miserable sinner, she knew that Madge Wildfire was no worse a sinner. She had sympathy with every passion as well as every virtue of true womanhood. There was a hearty, frank, and sometimes even irrepressible laugh in my mother. If, however, there was the least bitterness or irony in a jest, my mother did not like it; but my father and I liked it all the more, if it were just; and, so far as I could understand it, I rejoiced in all the sarcasm of *Don Juan*. Only two things I consciously recognized, that Byron's truth of observation was the most exact and his chosen expression the most concentrated that I had yet found in literature. By that time my father had himself put me through the first two books of *Livy*, and I knew, therefore, what close-set language was; but I saw then that *Livy*, as afterward *Horace* and *Tacitus*, was studiously, often laboriously, and sometimes obscurely concentrated, while Byron wrote as easily as a hawk flies and as clearly as a lake reflects the exact truth in the precisely narrowest terms; nor only the exact truth, but the most central and useful one. I saw then that both Byron and Turner were right in all things that I knew right from wrong in, and that they must thenceforth be my masters, each in his own domain.

"I had a sharp attack of pleurisy in 1835, and during the period of nursing and petting afterward I read *The Fair Maid of Perth*, learned the song of Poor Louise, feasted on Stanfield's drawing of St. Michael's Mount and Turner's *Santa Saba*, Pool of Bethesda, and Corinth, engraved in the Bible series. I got an immense quantity of useful learning out of those four plates. Moreover, I planned all my proceedings on my journey to Switzerland, which was to begin the moment I

was strong enough. I shaded in cobalt a cyanometer, to measure the blue of the sky with; bought a ruled notebook for geological observations, and a large quarto for architectural sketches, with a square rule and a foot rule ingeniously fastened outside, and I determined that the events and sentiments of this journey should be described in a poetic diary in the style of *Don Juan*, artfully combined with that of *Childe Harold*. Two cantos of this work were finished, carrying me across



RUSKIN'S EARLY HOME AT HERNE HILL.

France to Chamouni, where I broke down, finding that I had exhausted on the Jura all the descriptive terms at my disposal, and that none were left for the Alps.

"In this journey of 1835 I first saw Rouen and Venice—Pisa not till 1840. There have been three centers of my life's thought—Rouen, Geneva, Pisa. All that I did at Venice was by-work because her history had been falsely written before, and not even by any of her own people understood, and because in the world of painting Tintoret was virtually unseen, Veronese unfelt, Carpaccio not so much as named when I began to study them.

"My father's Spanish partner, Mr. Domecq, was living in 1835 in the Champs Elysées with his

English wife and his five daughters, the eldest on the eve of her marriage with one of Napoleon's officers and the four others, much younger, at home on vacation from a convent school. We had happy family dinner with them—played afterward 'la toilette de madame' with me, only I couldn't remember whether I was the necklace or the garters. Then Clotilde and Cécile played *Les Échos* and other fascinations of dance melody, only I couldn't dance. It puzzles me that I should have no recollection of my first opera, but I then heard four great musicians, all rightly to be called of genius, singing together, with sincere desire to assist each other, not eclipse, and to exhibit not only their own power of singing, but the beauty of the music they sang. Still more fortunately it happened that a woman of faultless genius led the dances—Taglioni; a person of the highest natural faculties and stainless, simple character, gathered with sincerest ardor and reverence into her art. Afterward a season did not pass without my hearing, twice or thrice at least, those four singers.

"Some little effort was made to pull me together in 1836 by sending me to hear Mr. Dale's lectures at King's College, where I explained to Mr. Dale, on meeting him one day in the court of entrance, that porticoes should not be carried on the top of arches. The lectures were on early English literature, of which, though I had never read a word of any before Pope, I thought myself already a much better judge than Mr. Dale. His quotation of 'Knut the king came sailing by' stayed with me, and I think that was about all I learned, during the summer; for, as my adverse stars would have it, my father's partner, Mr. Domecq, asked if he might leave his daughters at Herne Hill. Clotilde, a graceful, oval-faced blonde of fifteen; Cécile, a dark, finely browed, beautifully featured girl of thirteen; Elise, fair, round-faced like an English girl, a treasure of good nature and good sense; Caroline, a delicately quaint little thing of eleven. Deeper than any one dreamed, the sight of them in the Champs Elysées had sealed itself in me, for they were the first well-bred and well-dressed girls I had ever spoken to. I was thrown, bound hand and foot, in my unaccomplished simplicity, into the fiery furnace or fiery cross of these four girls, who of course reduced me to a mere heap of white ashes in four days. Four days, at the most, it took to reduce me to ashes, but the *Mercredi des cendres* lasted four years. Anything more comic in the externals of it, anything more tragic in the essence, could not have been invented by the skillfullest designer in either kind. In my social behavior and mind I was a curious combination of Mr. Traddles, Mr. Toots, and Mr. Winkle. I had the real fidelity and single-mindedness of Mr. Traddles, with the conversational abilities of Mr. Toots, and the heroic ambition of Mr. Winkle—all these illuminated by imagination, like Mr. Copperfield at his first Norwood dinner. Clotilde (Adèle Clotilde in full, but her sisters called her Clotilde, after the queen saint, and I Adèle because it rhymed with shell, spell, and knell) was only made more resplendent by the circlet of her sisters' beauty, while my own shyness and unrepresentableness were further stiffened, or rather sanded, by a patriotic and Protestant conceit which was tempered neither by politeness nor sympathy; so that, while in company I sat jealously miserable like a stockfish (in truth, I imagine like nothing so much as a skate in an aquarium trying to get up the glass), on any blessed occasion of *tête-à-tête* I endeavored to entertain my Spanish-born, Paris-bred, and Catholic-hearted mistress with my own views upon the subject of the

Spanish Armada, the battle of Waterloo, and the doctrine of transubstantiation. I wrote with great pains a story about Naples (which I had never seen), and the Bandit Leoni, whom I represented as typical of what my own sanguinary and adventurous disposition would have been had I been brought up a bandit; and *The Maiden Giuletta*, in whom I portrayed all the perfections of my mistress. Our connection with Messrs. Smith & Elder enabled me to get this story printed in *Friendship's Offering*, and Adèle laughed over it in rippling ecstasies of derision, of which I bore the pain bravely for the sake of seeing her thoroughly amused. I dared not address any sonnets straight to herself, but when she went back to Paris wrote her a French letter seven quarto pages long, descriptive of the desolations and solitudes of Herne Hill since her departure. This letter, either Caroline or Elise wrote to tell me, she had really read and 'laughed immensely at the French of.' Bitterly ashamed of the figure I had made, but yet not a whit dashed back out of my daily swelling foam of furious conceit, supported as it was by real depth of feeling and by a true and glorious sense of the newly revealed miracle of human love in its exaltation of the physical beauty of the world, I set myself in my seventeenth year, in a state of majestic imbecility, to write a tragedy on a Venetian subject, in which the sorrows of my soul were to be enshrined in immortal verse.

"Out of my feebly luminous complaints to that luminary I was startled by a letter to my father from Christ Church College, advising him that there was room for my residence in the January term of 1837. Strangely enough, my father had never inquired into the nature or manner of matriculation till he took me up to display in Oxford. He never had any doubt about putting me at the most fashionable college, and of course my name had been down at Christ Church years before I was called up; but it had never dawned on my father's mind that there were two—fashionable and unfashionable—orders or castes at Christ Church, one of these being called gentlemen commoners and the other commoners. My father did not like the word 'commoner'—all the less because our relationships in general were not uncommon. I was entered as a gentleman commoner without further debate, and remember still, as if it were yesterday, the pride of first walking out of the Angel Hotel, and past University College, holding my father's arm, in my velvet cap and silk gown. Of course I never used a crib, but I believe the dean would rather I had used fifty than borne the puzzled and helpless aspect which I presented toward the afternoon over whatever I had to do. And as my Latin writing was, I suppose, the worst in the university, as I never by any chance knew a first from a second future, or even, to the end of my Oxford career, could get into my head where the Pelasgi lived, or where the Heraclidae returned from, it may be imagined with what sort of countenance the dean gave me his first and second fingers to shake at our parting, or with what comfort I met the inquiries of my father and mother as to the extent to which I was, in college opinion, carrying all before me. As time went on, the aspect of 'my college hall to me meant little more than fear and shame of those examination days. I had been received as a good-humored and inoffensive little cur, contemptuously, yet kindly, among the dogs of race at the gentleman commoners' table; and my tutor and the men who read in class with me were beginning to recognize that I had some little gift in reading

with good accent, thinking of what I read, and even asking troublesome questions about it, to the extent of being one day eagerly and admiringly congratulated by the whole class the moment we got into quad, on the consummate manner in which I had floored our tutor, I having no more intention to floor, or consciousness of having floored, than a babe unborn. A few weeks after coming up my tutor announced to me, with a look of approval, that I was to read my essay in hall on Saturday. I descended from the rostrum to receive, as I doubted not, the thanks of the gentleman commoners. Not in envy, but in fiery disdain, varied in expression through every form and manner of the English language, they explained to me that I had committed *lèse-majesté* against the order of gentleman commoners; that no gentleman commoner's essay ought ever to contain more than twelve lines, with four words in each; and that the impropriety of writing an essay with any meaning in it, like vulgar students, the thoughtlessness and audacity of reading one that would take at least a quarter of an hour, and then reading it all, might for this once be forgiven to such a greenhorn, but that Coventry wasn't the word for the place I should be sent to if I ever did such a thing again.

"I went back to Oxford in January, 1840, for the last push. The work had come by that time to high pressure, until twelve at night from six in the morning, with little exercise, no cheerfulness, and no sense of any use in what I read, to myself or anybody else. One evening a short, tickling cough surprised me, because preceded by a curious sensation in the throat, and followed by a curious taste in the mouth, which I presently perceived to be that of blood. My mother steadily maintained there was nothing serious the matter, and that I only wanted rest and fresh air. Sir James Clark cheerfully but decidedly ordered me abroad before autumn.

"I found my life again, all the best of it, and so the year 1842 dawned for me with many things in its morning cloud. I went up for my degree, but find no entry of it. I only went up for a pass, but still wrote Latin so badly that there was a chance of my not passing, but the examiners forgave it because the divinity, philosophy, and mathematics were all above the average, and they gave me a complimentary double fourth. What should I be or do? My utterly indulgent father was ready to let me do anything, with my room always luxuriously furnished in his house, my expenses paid if I chose to travel. I had not the least love of adventure, but liked to have comfortable rooms always ordered, and a three-course dinner ready by three o'clock. Although no coward under circumstances of accidental danger, I extremely objected to any vestige of danger as a continuous element in one's life. I would not go to India for fear of tigers, nor to Russia for fear of bears, nor to Peru for fear of earthquakes. This year I did not draw much; the things I now saw were beyond drawing; but I took to careful botany, while the month's time set apart for Chamouni was spent in merely finding out what was to be done, and where. We went home by the Rhine and Flanders.

"Perhaps my mother had sometimes admitted into her quiet soul the idea that it might be nice to have a larger garden. Sometimes a gold-tasseled Oxford friend would come out from Cavenish or Grosvenor Square to see me, and there was only the little back room opposite the nursery for him to wash his hands in. As his bank balance enlarged, even my father thought it possible that his country customers might be more

impressed by enjoying their after-dinner sherry with more room for their legs. And now that I was of age, and B. A., and so on, did not I also want a larger house? No; but ever since I could drive a spade I had wanted to dig a canal, and make locks on it, like Harry in Harry and Lucy. And in the field at the back of the Denmark Hill house, now, in this hour of all our weaknesses, I saw my way to a canal with any number of locks down toward Dulwich.

"At last the lease of the larger house was bought, and everybody said how wise and proper, and my mother did like arranging the rows of pots in the big greenhouse; and the view from the breakfast room into the field was really very lovely. And we bought three cows, and skimmed our own cream, and churned our own butter. And there was a stable and a farmyard and a haystack, and a pigsty, and a porter's lodge, where undesirable visitors could be turned back before startling us with their knock. But for all these things we never were so happy again—never more at home; and I never got my canal dug, after all!

"The next year there was traveling enough for us up and down the new garden walks. Also, the first volume of *Modern Painters* took the best of the winter's leisure. The house itself had no specialty, either of comfort or inconvenience; the breakfast room, opening on the lawn and farther afield, was extremely pretty when its walls were covered with lakes by Turner and doves by Hunt; the dining and drawing rooms were spacious enough for our grandest receptions—never more than twelve at dinner, with perhaps Henry Watson and his sisters in the evening—and had decoration enough in our Northcote portraits, Turner's *Slave Ship*, and, in later years, his *Rialto*, with our John Lewis and two Copley Fieldings, and every now and then a new Turner drawing. My own workroom, above the breakfast room, was only distinct as being such, in its large, oblong table, occupying so much of the fifteen by twenty-five feet of available space within bookcases that the rest of the floor virtually was only passage around it. I always wrote on the flat of the table, a bad habit, enforced partly by the frequent need of laying drawings or books of reference beside me.

"I had two distinct instincts to be satisfied, rather than ends in view, as I wrote day by day with higher kindled feeling the second volume of *Modern Painters*. The first, to explain to myself, and then demonstrate to others, the nature of that quality of beauty which I now saw to exist through all the happy conditions of living organisms, and down to the minutest detail and finished material structure naturally produced. The second, to explain and illustrate the power of two schools of art unknown to the British public, that of Angelico of Florence and Tintoret of Venice. I have no knowledge, and can form no conjecture, of the extent to which the book in either direction accomplished its purpose. It is usually read only for its pretty passages; its theory of beauty is scarcely ever noticed, its praise of Tintoret has never obtained the purchase of any good example of him for the National Gallery. But I permit myself—perhaps with vain complacency—the thought that I have had considerable share in the movement which led to the useful work of the Arundel Society in Italy, and to the enlargement of the National collection by its now valuable series of fourteenth century religious paintings. The style of the book was formed on a new model, given me by Osborne Gordon. I was old enough now to feel that

neither Johnsonian balance nor Byronic alliteration were ultimate virtues in English prose, and I had been reading with care, on Gordon's counsel, both for its arguments and its English, Richard Hooker's *Ecclesiastical Polity*. I had always a trick of imitating more or less the last book I had read with admiration. At all events, I did the best I then knew how, leaving no passage till I had put as much thought into it as it could be made to carry, and chosen the words with the utmost precision and tune I could give them."

Ruskin began his study of social conditions in Switzerland, and physical deformity from the "noon wind," which he came to realize as the distorment of trees, he believed to be associated with warped lives and dwarfed opportunities. He made many fruitless efforts to establish a center of beneficial influence. He writes: "Up to the year with which I am now concerned, 1849, when I was just thirty, no plans of this sort had dawned on me; but the journeying of the year, mostly alone, for the work necessary for the fourth volume of *Modern Painters*, gave me the melancholy knowledge of the agricultural condition of the great Alpine chain, which was the origin of the design for St. George's Guild, and virtually closed the days of youthful happiness and began my true work in the world—for what it is worth."

In the closing chapter of his autobiography Ruskin says: "In blaming myself, as often I have done, and may have occasion to do again, for my want of affection to other people, I must also express continually more and more wonder that ever anybody had any affection for me. I thought they might as well have got fond of a camera lucida or an ivory foot rule. All my faculty was merely in showing that such and such things were so; I was no orator, no actor, no painter but in a minute and generally invisible manner; and I couldn't bear being interrupted in anything I was about. Nevertheless, some sensible grown-up people did get to like me, the best of them with a protective feeling that I wanted guidance no less than sympathy, and the higher religious souls hoping to lead me to the golden gates."

When Ruskin turns his analytical powers upon his own nature, it makes profoundly interesting reading, although something in the dramatic but simple fashion of the telling makes one doubt whether he really conceived his own character more accurately than he did that of the world he afterward so savagely and so sorrowfully desired and failed to aid. He says: "The thoughtful reader must have noticed with some displeasure that I have scarcely, whether at college or at home, used the word 'friendship' with respect to any of my companions. The fact is, I am a little puzzled by the speciality and singularity of poetical and classic friendship. I get distinctively attached to places, to pictures, to dogs, cats, and girls, but I have had—Heaven be thanked!—many and true friends, young and old, who have been of boundless help and good to me—nor I quite helpless to them—yet for none of whom have I ever obeyed George Herbert's mandate: 'Thy friend put in thy bosom; wear his eyes still in thy heart, that he may see what's there; if cause require, thou art his sacrifice,' etc. Without thinking myself particularly wicked, I found nothing in my heart that seemed to me worth anybody's seeing; nor had I any curiosity for insight into those of others; nor had I any notion of being a sacrifice for them, or the least wish that they should exercise, for my good, any but the most

pleasurable accomplishments—Dawtrey Drewitt, for instance, being further endeared because he could stand on his head and catch vipers by the tail; Gershom Collingwood, because he could sing French songs about the Earthly Paradise; and Alic Wedderburn, because he could swim into tarns and fetch out water lilies for me like a water spaniel. And I never expected that they should care much for me, but only that they should read my books; and looking back, I believe they liked and like me nearly as well as if I hadn't written any. First, then, of this Love's Meinie of my own age, or under it, William McDonald took to me, and got me to promise to come to him at Crossmount, where it was his evangelical duty to do some shooting in due season. After once walking up Schehallien with him and his keepers, with such entertainment as I could find in the mewing and shrieking of some seventy or eighty gray hares who were brought down in bags and given to the poorer tenantry, and forming a final opinion that the poorer tenantry might better have been permitted to find the stock of their hare soup for themselves, I forswore further fashionable amusement, and set myself, when the days were fine, to the laborious eradication of a crop of thistles which had been too successfully grown by northern agriculture in one of the best bits of unboggy ground by the Tummel. The ambitions in practical gardening, of which the germs had been blighted in Herne Hill, nevertheless still prevailed over the contemplative philosophy in me so far as to rekindle the original instinct of liking to dig a hole whenever I got leave. Sometimes, in the kitchen garden of Denmark Hill, the hole became a useful furrow; but when once the potatoes and beans were set, I got no outlet nor inlet for my excavatory fancy or skill during the rest of the year. The thistle field at Crossmount was an inheritance of amethystine treasure to me; and the working hours in it are among the few in my life which I remember with entire serenity, as being certain I could have spent them no better. For I had wise—though I say it—thoughts in them, too many to set down here (they are scattered afterward up and down in Fors and Munera Pulveris), and wholesome sleep after them, in spite of the owls, who were many in the clumps of pine by Tummel shore. On the Cumberland and Swias lakes, and within and without the Lido, I had learned to manage a boat—an extremely different thing from steering one in a race—and the little two-foot steps of Tummel were, for scientific purposes, as good as falls twenty or two hundred feet high. I found that I could put the stern of my boat full six inches into the air over the top of one of these little falls, and hold it there, with very short sculls, against the level stream, with perfect ease for any time I liked, and any child of ten years old may do the same. Half my power of ascertaining facts of any kind connected with the arts is in my stern habit of doing the thing with my own hands till I know its difficulty, and though I have no time nor wish to acquire showy skill in anything, I make myself clear as to what the skill means and is. Thus, when I had to direct roadmaking at Oxford, I sate myself with an iron-masked stonebreaker on his heap to break stones beside the London road till I knew how to advise my too impetuous pupils to effect their purposes in that matter, instead of breaking the heads of their hammers off (a serious item in our daily expenses). I learned from an Irish street-crossing sweeper what he could teach me of sweeping, but found myself in that matter nearly his match; and again and

again I swept bits of St. Giles's foot pavements, showing my corps of subordinates how to finish into depths of gutter. I worked with a carpenter until I could make an even shaving six feet long off a board, and painted enough with properly and delightfully sloppy green paint to feel the master's superiority in the use of a blunt brush. But among all these and other such student-ships the instrument I finally decided to be the most difficult to manage was the trowel. For accumulated months of my boy life I watched bricklaying and paving, but when I took the trowel into my own hand I abandoned at once all hope of the least real skill with it unless I gave up all thoughts of any future literary or political career. But quite the happiest bit of manual labor I ever did was for my mother in the old inn at Sixt, where she alleged the stone staircase to have become unpleasantly dirty since the last year. Nobody in the inn appearing to think it possible to wash it, I brought the buckets of water from the yard myself, poured them into a beautiful image of Versailles waterworks down the fifteen or twenty steps of the great staircase, and with the strongest broom I could find cleaned every step into its corners. It was quite lovely work to dash the water and drive the mud from each with accumulating splash down the next one.

"The admiration of tree branches at Fontainebleau led me into careful discernment of their species; and while my father, as was his custom, read to my mother and me for half an hour after breakfast, I always had a fresh-gathered outer spray of a tree before me, of which the mode of growth, with a single leaf full size, had to be done at that sitting in fine pen outline, filled with the simple color of the leaf at one wash. On fine days, when the grass was dry, I used to lie down on it and draw the blades as they grew, with the ground herbage of buttercup or hawkweed mixed among them, until every square foot of meadow or mossy bank became an infinite picture and possession to me, and the grace and adjustment to each other of growing leaves a subject of more curious interest to me than the composition of any painter's masterpiece. The love of complexity and quantity influencing my preference of flamboyant to pure architecture was here satisfied without qualifying sense of wasted labor by what I felt to be the constant working of Omnipotent kindness in the fabric of the food-giving tissues of the earth; nor less, morning after morning, did I rejoice in the traceries and the painted gloss of the sky at sunrise.

"This physical study had advanced since 1842, when it began, until in 1847 it had proceeded into botanical detail, and the collection of material for *Proserpina* began with the analysis of a thistle top, as the foundation of all my political economy was dug down to, through the thistle field of Cressmount. Analysis of thistle top, I say, not dissection nor microscopic poring into. Flowers, like everything else that is lovely in the visible world, are only to be seen rightly with the eyes which the God who made them gave us, and neither with microscopes nor spectacles. These have their uses for the curious and the aged. But in health of mind and body men should see with their own eyes, hear and speak without trumpets, walk on their feet, not on wheels, and work and war with their arms, not with engine beams nor rifles warranted to kill twenty men at a shot before you can see them. And far more difficult work than this was on foot in other directions. Too sorrowfully it had now become plain to me that neither George Herbert, nor Richard Hooker, nor Henry Melville, nor Thomas Dale, nor the Dean of

Christ Church, nor the Bishop of Oxford could in any wise explain to me what Turner meant by the contest of Apollo with the python or by the repose of the great dragon above the garden of the Hesperides. For such nearer python as might wreath itself against my own now gathering strength, for such serpent of eternity as might reveal its awe to me amid the sands even of Forest Hill or Addington Heath, I was yet wholly unprepared."

Has the great analyst laid bare in these few pages the secret of his lamentable failure in the world of men and of the social forces? He mistook the former for dwarfed and distorted physical creations. He "saw men as trees walking," and he mistook the great plantation of society for a field of thistles and a meadow or woodland, where the uprooting was to be ruthless and the blendings of light and color given full play in heaven's own atmosphere. He forgot that no amount of patient study could show him the "noon wind" from the great mountain chains of the spiritual world; that the minglings of mental and moral powers were as much hidden from human searching as is the growth of a flower from the peeping and probing student of stem and root. The most sorrowful part of it was that right there, where he felt called of God to apply all his powers to the good of men whom God had made, he threw away all the noble lessons he had learned and taught so well to others, and forgot his long patience and its results. He spent years over the same few pages of literature, months studying a single group of stone, a sand heap, a square inch of foliage—with ear close to the ground, with eye aflame with acute and beloved attention; and when he came to write for, to speak to, to build and plan and work for men, he made no study of that world of humanity from which his own had been shut out as if by monastery walls. Where he had bidden the world take nothing in Nature for granted, but turn a patient and devout eye and ear to watch and listen through silence and through storm, he now bade it, with scorn, bitterness, and an agony of impatience, heed only his teaching and his practical methods of transforming society. The mental, moral, and physical freedom he had insisted upon for himself, often at the cost of the love or sympathy of his fellows, he imperiously denied to others. The science of fitting things to their own places through faithfully learning how they had come into such relations, he threw contempt upon by his unscientific methods of using his influence and his wealth. He had learned to break stones from humble stonebreakers, but he came to threaten to break the heads of those who did not desire to break stones as he did. Ruskin presents the most striking instance of the need of the world for patriots and lovers, not reformers; of builders, not iconoclasts.

Ruskin's life and work stand as a beacon light of welcome and of warning. His sincerity, his purity, his devotion to duty, his fine ideals, and his noble contributions to literature and art will live in memory while English life endures; but his misconceived, clumsy, bigoted, and conceited attempt to snatch the Maker's trowel out of his hand and to shape bricks without straw and walls without cement or alignment will serve as a warning to some wiser generation than the ones that have witnessed the attempt and are even now trying in puny ways to establish the earth on new and insecure foundations. If his readers will learn from Ruskin that "in health of mind and body men should see with their own eyes, hear and speak without trumpets, walk on their own feet, and work and war with their own arms," there

will be fewer attempts to establish philanthropic hospitals. If they will remember that "a flower is to be watched as it grows, in its association with the earth, the air, and the dew; its leaves are to be seen as they expand in the sunshine; its colors as they embroider the field or illumine the forest," there will be fewer efforts to transplant earth's children to social hotbeds. This is the present problem, and if Ruskin's fidelity and faith remain and overbalance his passionate unwisdom in their application, it will be well for the thousands to whom his prolific brain has spoken.

Here let Ruskin present his own explanation and apology. He says, in *Præterita*: "Often in my other books, and now once for all and finally here, I have to pray my readers to note that this continually increasing arrogance was not founded on vanity in me, but on sorrow. There is a vast difference, there is all the difference, between the vanity of displaying one's own faculties and the grief that other people do not use their own. Vanity would have led me to continue writing and drawing what every one praised, and disciplining my own already practiced hands into finer dexterities. But I had no thought but of learning more and teaching what truth I knew, assuredly then and ever since, for the student's sake, not my own fame's."

A notable instance of the strange inconsistencies of perception and emotion which characterized Ruskin's mind is seen in his essay on War, in the volume entitled *The Crown of Wild Olive*. In the opening paragraphs he says: "All the pure and noble arts of peace are founded on war; no great art ever yet rose on earth but among a nation of soldiers." After quoting Egypt and Greece as evidences of the truth of his statement, he says: "You are to remember, in passing to the next phase of history, that though you must have war to produce art, you must also have much more than war, namely, an art instinct or genius in the people; and that, though all the talent for painting in the world won't make painters of you unless you have the gift for fighting as well, you may have the gift for fighting and none for painting. 'It may be so,' I can suppose that a philanthropist might exclaim. 'Perish then the arts, if they can flourish only at such a cost. What worth is there in toys of canvas and stone if compared to the joy and peace of artless domestic life?' And the answer is: Truly, in themselves, none. But as expressions of the highest state of the human spirit their worth is infinite. As results they may be worthless, but as signs they are above price. For it is an assured fact that, whenever the faculties of men are at their fullness, they must express themselves in art; and to say that a state is without such an expression is to say that it is sunk from its proper level of manly nature. So that, when I tell you that war is the foundation of all the arts, I mean also that it is the foundation of all the high virtues and faculties of men. It was very strange to me to discover this, and very dreadful, but I saw it to be quite an undeniable fact. The common notion that peace and the virtues of civil life flourished together I found to be wholly untenable. Peace and the vices of life only flourish together. We talk of peace and learning and of peace and plenty and of peace and civilization, but I found that those were not the words which the Muse of History coupled together; that on her lips the words were—peace and sensuality, peace and selfishness, peace and corruption, peace and death. I found, in brief, that all great nations learned their truth of word and strength of thought in war; that they were nourished in war and wasted by peace, taught by war and deceived

by peace, trained by war and betrayed by peace—in a word, that they were born in war and expired in peace. Yet now note carefully, in the second place, it is not *all* war of which this can be said. It is not the ravage of a barbarian wolf flock nor the habitual restlessness and rapine of mountaineers, as on the old borders of Scotland; nor the occasional struggle of a strong, peaceful nation for its life, as in the wars of the Swiss with Austria; nor the contest of merely ambitious nations for extent of power, as in the wars of France under Napoleon or the just terminated war in America [the civil war in the United States]. None of these forms of war build anything but tombs. But the creative and foundational war is that in which the natural instincts of self-defense are sanctified by the nobleness of the institutions and purity of the households which they are appointed to defend. To such war as this all men are born; in such war as this any man may happily die; and forth from such war as this have arisen throughout the extent of past ages all the highest sanctities and virtues of humanity."

Ruskin was addressing the men of the Royal Military Academy at Woolwich. In closing, after pleading with them to live clean and manly lives, and after apostrophizing the mothers, wives, and lovers of these men, he says: "But truly, if it might be, I, for one, would fain join in the cadence of hammer strokes that should beat swords into plowshares; and that this can not be is not the fault of us men. It is *your* fault, wholly yours. Only by your command or by your permission can any contest take place among us. And the real, final reason for all the poverty, misery, and rage of battle throughout Europe is simply that you women, however good, however religious, however self-sacrificing for those you love, are too selfish and too thoughtless to take pains for any creature out of your own immediate circles. You fancy that you are sorry for the pains of others. Now I just tell you this, that if the usual course of war, instead of unroofing peasants' houses and ravaging peasants' fields, merely broke china upon your own drawing-room tables, no war in civilized countries would last a week. I tell you more, that at whatever moment you choose to put a period to war you could do it with less trouble than you take any day to go out to dinner. You know, or at least you might know if you would think, that every battle you hear of has made many widows and orphans. We have none of us, truly, heart enough to mourn with these. But at least we might put on the outer symbols of mourning with them. Let but every Christian lady who has conscience toward God vow that she will mourn, at least outwardly, for his killed creatures. Your praying is useless and your churchgoing mere mockery of God if you have not plain obedience in you enough for this. Let every lady in the upper classes of civilized Europe simply vow that while any cruel war proceeds she will wear black, a mute's black, with no jewel, no ornament, no excuse for or evasion into prettiness—I tell you again, no war would last a week. And, lastly, you women of England are all now shrieking with one voice—you and your clergymen together—because you hear of your Bibles being attacked. If you choose to obey your Bibles, you will never care who attacks them. It is just because you never fulfill a single downright precept of the Book that you are so careful for its credit, and just because you don't care to obey its whole words that you are so particular about the letters of them. The Bible tells you to dress plainly, and you are mad for finery: the Bible tells you to have pity on the poor, and you





J Runkin

crush them under your carriage wheels; the Bible tells you to do judgment and justice, and you do not know, nor care to know, so much as what the Bible word 'justice' means. Do but learn so much of God's truth as that comes to; know what he means when he tells you to be just; and teach your sons that their bravery is but a fool's boast, and their deeds but a firebrand's tossing, unless they are indeed just men and perfect in the fear of God, and you will soon have no more war unless it be such as is willed by him of whom, though Prince of Peace, it is also written, 'In righteousness he doth judge and maketh war.'

This passage gives the key to much of Ruskin's failure to act harmoniously with his fellow-men. Clear and just of vision when his eye was fixed on a distant and pure ideal, he was purblind and cross-eyed when gazing upon the every-day scenes of life about him. He walked with a free stride on alpine heights that dizzied the brains of common mortals, but fell sprawling in a muddy pool for lack of ability to turn gracefully into the path that skirts it. Even Ruskin's iron will and true desire and financial power could not make a home for workmen where their heart had laid no gift on the altar. A sacred fire will not glow to order.

He discerned and pointed out the fact that warfare in a noble cause is humanity's effort to lay upon the altar of sacrifice the noblest gifts; and that as such it advances the cause of true and lasting peace infinitely more than can a supine and meretricious truce with evil. He recognized the power of woman's influence, and then he poured forth commonplace and ridiculous denunciation against all war and against womankind as its sole instigator and abettor. And the remedy he proposed was as absurd as his opinions. The present confusion of thought on this subject of war and woman's responsibility concerning it are perhaps partly due to the errors of this magnetic writer and speaker.

In 1839 Ruskin gained the Newdigate prize for English poetry, at Oxford, by a poem entitled *Salsette and Elephanta*. He was graduated in 1842. He studied painting under Copley Fielding and Harding, but he says himself that his real masters were Rubens and Rembrandt. The first volume of his *Modern Painters* appeared in 1843. He says it was called forth by a desire to reply to a criticism of Turner's works which appeared in *Blackwood's Magazine*. His purpose was to show the superiority of Turner to all the modern landscape painters, and to show, as well, the superiority of modern landscape painters to the old masters in that branch of art. He spared no reputation that seemed to him undeserved, and condemned old and new alike with such severity that he created bitter animosity. But so transcendent was the beauty of his style, and so original and sincere the criticism, that he held the public and began to have great weight in swaying opinion. In 1846 he republished the volume in a greatly altered form. Three other volumes on the *Modern Painters* appeared later; the fifth and last was not published until 1860. The whole work had then become an extended discussion of the principles of art, an artistic and symbolical treatment of natural scenery and life, imaginative and poetic descriptions illustrated with drawings from his own hand. A revised and altered edition of the whole work appeared in 1860-'67, and another in 1873, and an edition in 6 volumes, with some additional plates, an epilogue, and a new index, in 1889. In 1849 he published *The Seven Lamps of Architecture*, and in 1851-'53 *The Stones of Venice*. Both were exquisitely illustrated by himself, and they were designed to

present lofty and beautiful ideals of domestic architecture.

Preraphaelitism meantime had begun to assume the form of a distinct phase or school of art in England, and Ruskin espoused its cause with his usual ardor. He wrote notes, pamphlets, and letters on the Academy Exhibition from 1855 to 1860. Indeed, Ruskin may be said to have made a cult of what was merely an opinion. He defined the underlying principle of preraphaelitism to be the determination "to paint things as they probably did look and happen, not as, by rules of art developed under Raphael, they might be supposed gracefully, deliciously, or sublimely to have happened." In 1854 Ruskin published *Lectures on Architecture and Painting* and *The Two Paths*, these being lectures on art and its application to decoration and manufacture. In 1857 appeared *The Elements of Drawing*, and in 1859 *The Elements of Perspective*. Among his other books on art are *Aratra Pentelici*, on the principles of sculpture; *The Laws of Fesolè*, the elements of painting and drawing; *Fronde Agrestes*, which is made up of readings from *Modern Painters*; *Giotto and his Works*; *Val d'Arno*, lectures on the art of the thirteenth century in Pisa and Florence; *Pleasures of England*, containing lectures on the modern art of England and the history of England; *Mornings in Florence*, studies of Christian art for English travelers; and *St. Mark's Rest*, on the history of Venice. Kindred to the books on art were the books on the studies of Nature made while Ruskin was studying and welding his art material. These include *Ethics of the Dust*, lectures on crystallization; *Ariadne Florentina*, lectures on wood engraving; *Love's Meinie*, on birds; *Deucalion*, studies of the lapse of waves and life of stars; *The Eagle's Nest*, which directly discusses the relation of natural science to art; and *Proserpina*, studies of wayside flowers. Of other general writing, striking instances are seen in *Notes on the Construction of Sheepfolds*, which deals with church discipline; *The Queen of the Air*, a study of the Greek myths of cloud and storm; *Sesame and Lilies*, two lectures on the education of men and women; *The King of the Golden River*, a fairy story with a moral and a study of Nature.

This series of works presents one side of Ruskin's nature, or rather one phase of his life work, for, in reality, all his work is one, though from the subjects treated and the methods of working them out they appeared to be at war with one another or to have no relation. Such as they are, they belong together. Side by side with the art and Nature study and literature is the life-long picturing of and experiment with politico-social conditions. While actively engaged, after studying painting and architecture abroad, in writing at home from the gathered material, Ruskin for several years taught drawing at the Workingmen's College, and began to lecture to workmen. He became widely popular in the latter field, and delivered courses of lectures, which were freely and lovingly given, at South Kensington Museum, Manchester, Bradford, to members of the Architectural Association in Lyon's Inn Hall, and at Tunbridge Wells. His *Two Paths* was meant to teach the dependence of all noble design on organic form, and the divergence of the two paths of study—the conventional or dead, and the organic or living, in art. He said his writings on art had not been matters of choice, as it had always seemed to him he might have done more good in other ways, but of necessity. He believed he saw injustice done, and

heard falsehood taught: he must needs try to remedy the one, and was compelled to deny the other. He believed his work to have grown to its natural shape and size in his social writing and effort. He says: "Of that tree, if any fruit grow such as you like, you are welcome to gather it without thanks; and so far as it is poor or bitter, it will be some justice to refuse it without reviling." The rhetoric is charming, but the truth is that those who would have been glad to gather such good as they could make use of had their heads broken because they did not gather and use it all just as it was shaken or flung at them; and if denunciation is reviling, then those who refused it all received a portion with the wicked. During the years from 1860 to 1870 Ruskin's interest in social matters encroached more and more upon his art life and work, and finally overwhelmed it utterly. In 1857 he had proclaimed the power over him of Thomas Carlyle, "my master," as he always called him, and the influence of the great cynic and dogmatist is but too painfully evident upon the naturally sweet and tender and truly Christian character of Ruskin. What the rude thought and uncouth literary style of Carlyle could not do in pressing home his opinions upon his countrymen, that Ruskin tried to do for him with inimitable grace. Detestation of the world as it is was the prominent feeling with both writers, but one hated while he detested, and the other loved.

Ruskin's Manchester lectures first revealed him as a political economist of a novel type. In these lectures he treats of the duties of the nation in relation to art and artistic genius—the discovery, application, accumulation, and distribution of them. Here may be found the germs of nearly all his later work in this direction. The topics dealt with were co-operation, contentment, legislation, expenditure, entertainment, the authority of the Bible, thanksgiving, demoniacal influence, dictatorship, and the necessity of law; the proper offices of bishop and overseer, and duke or leader; essential laws against theft by false work or bankruptcy, and by unjust profits; education and its relations to position in life; the evil effects of servile employments and excessive and improper work; improvidence in marriage; the dignity of the fine arts; the duties of the upper classes; the just tenure of land; the office of the soldier; inevitable distinctions of rank; and necessary submission to authority. In 1862 some of the teachings of these lectures had been expanded in *Unto this Last*. Time and Tide by Wear and Tyne, which contained 25 letters to a working-man in Sunderland, appeared in 1867. Its general theme was the nature of the laws bearing on honesty in work and exchange. "I tell you this," "You may take this for granted," "I know," "Believe me," he reiterated in all these letters, with delightful obliviousness of the fact that one, or ten, or twenty years before he had been equally positive that exactly the contrary of many of his statements was true.

In 1871 Ruskin began the publication of a periodical, issued monthly, called *Fors Clavigera*. This he kept up until he was overtaken by serious illness, caused by overwork, while writing the number for March, 1878. He resumed them after his recovery. He explains that the title, *Fors Clavigera*, meant "the fate which bears the club, the key, or the nail," the overpower, the guiding or the compelling forces of human life. In the opening article he says: "Consider the ridiculousness of the division of parties into Liberal and Conservative. There is no opposition whatever

between those two kinds of men. There is opposition between Liberals and Illiberals—that is to say, between people who desire liberty and who dislike it. I am a violent Illiberal, but it does not follow that I am a Conservative. A Conservative is a person who wishes to keep things as they are; and he is opposed to a destructive, who wishes to destroy them, or to an innovator, who wishes to alter them. Now, though I am an Illiberal, there are many things I should like to destroy. I should like to destroy most of the railroads of England, and all the railroads in Wales. I should like to destroy and rebuild the Houses of Parliament, the National Gallery, and the East End of London; and to destroy, without rebuilding, the new town of Edinburgh, north suburb of Geneva, and the city of New York. Thus in many things I am the reverse of conservative; nay, there are some long-established things which I hope to see changed before I die: but I want still to keep the fields of England green, and her cheeks red; and that girls should be taught to courtesy and boys to take their hats off when a professor or other dignified person passes by; and that kings should keep their crowns on their heads, and bishops their crosiers in their hands, and should duly recognize the significance of the crown and the use of the crook."

Near the close of the fifth number of the periodical he wrote: "There are three material things, not only useful but essential to life. No one 'knows how to live' till he has got them. These are pure air, water, and earth. There are three immaterial things not only useful but essential to life. No one knows how to live until he has got them also. These are admiration, hope, and love. These are the six chiefly useful things to be got by political economy when it has become a science. I will briefly tell you what modern political economy—the great '*savoir mourir*'—is doing with them. Heaven gives you the main elements of the first three. You can destroy them at your pleasure, or increase, almost without limit, the available quantities of them. You can vitiate the air by your manner of life, and of death, to any extent. You might easily vitiate it so as to bring such a pestilence on the globe as would end all of you. You or your fellows, German and French, are at present busy vitiating it to the best of your power in every direction, chiefly at this moment with corpses, and animal and vegetable ruin in war; changing men, horses, and garden stuff into noxious gas. But everywhere, and all day long, you are vitiating it with foul chemical exhalations; and the horrible nests which you call towns are little more than laboratories for the distillation into heaven of venomous smokes and smells, mixed with effluvia from decaying animal matter, and infectious miasmata from purulent disease. On the other hand, your power of purifying the air, by dealing properly and swiftly with all substances in corruption, by absolutely forbidding noxious manufactures, and by planting in all soils the trees which invigorate earth and atmosphere, is literally infinite. You might make every breath of air you draw food." And so on, through the category of changes that suggest a new heaven and a new earth. In closing, he laid out, in few words, the plan he would pursue in helping to found them both. He says: "The tenth of whatever is left to me I will make over to you in perpetuity, with engagement to add the tithe of whatever I earn afterward. Who else will help, with little or much? the object of such fund being to begin, gradually, no matter how slowly, to increase the buying and securing

of land in England, which shall not be built upon, but cultivated by Englishmen with their own hands and such help of force as they can find in wind and wave. If any come to help me, it is to be on the following conditions: We will try to make some small piece of English ground beautiful, peaceful, and fruitful. We will have no steam engines upon it, and no railroads; we will have no untended or unthought-of creatures on it: none wretched but the sick; none idle but the dead. We will have no liberty upon it, but instant obedience to known law and appointed persons; no equality upon it, but recognition of every betterness we can find, and reprobation of every worseness. When we want to go anywhere we will go there quietly and safely, not at forty miles an hour in the risk of our lives; when we want to carry anything anywhere, we will carry it either on the backs of beasts, or on our own, or in carts, or boats; we will have plenty of flowers and vegetables in our gardens, plenty of corn and grass in our fields, and few bricks."

From 1869 till 1879 Ruskin was Slade Professor of Art at Oxford. His superintendence of the practical work of art teaching was close and unwearied until it was terminated by his long and dangerous illness—a complete breaking down of his nervous strength. On his recovery he was reappointed and returned to the thankless post in 1883. He found large and increasing audiences, and was compelled to hold his lectures in the theater of the museum. This was crowded to the doors twice a week, and he was obliged to repeat each lecture. Graduates, undergraduates, and numbers of ladies attended. It might have been said of these lectures as Lowell said of Emerson's: "It was chaos come again, but it was a chaos full of shooting stars, of creative forces." No one who heard Ruskin could tell what the lectures were about from their titles, and hardly from their subject-matter, so disjointed were they and mingled of fanciful ethics and more fanciful theology, violent criticism on art and letters and life, all given with the marvelous beauty of diction and flood of emotion that never failed to astonish and move the hearer. But at last all this became too strange to be endured by those who cared most for Ruskin's reputation, and he was persuaded to resign the chair for a second time. In doing so he sent a characteristic letter to the vice-chancellor, in which he said that his reasons were that the university would not buy Turner's *The Crook of Lune*, and that by a recent vote it had sanctioned vivisection. As to the former, it may be said, in passing, that the university could not get its rents and had not paid its debts, so that £1,200 for a Turner was not forthcoming.

Ruskin had endowed munificently, from his own fortune, a mastership for the art school, and given it a series of valuable educational drawings. He did the same thing for the FitzWilliam Museum in Cambridge. His gifts to every object that seemed to him worthy were generous and frequent. He had inherited £175,000, and he died comparatively poor. St. George's Guild, which was founded as the result of the appeals in *Fors Clavigera*, was intended to be a return to primitive agricultural life where the old simple virtues should be instilled and insisted upon; where the old and homely methods of hand work should do all that was required, without aid from any modern machine or manufacture.

In the later numbers of *Fors Clavigera* Ruskin used to publish the accounts of his own private income and expenditure and of the Order or Company of St. George, which he had endowed, and

for which he was constantly appealing to his countrymen for sympathy and support. The object of the association was to promote good and honest work. The vows taken, founded on belief in the goodness of God and the dignity of human nature, inculcated honor, honesty, industry, frugality, gentleness, and obedience. As the hopelessness of this struggle against the world as it is, and mankind in its daily need and real desire, was gradually borne in upon a mind that was blind to the causes of its failure, Ruskin became more bitter in his detestation of the art and manners, trade and commerce, impulse and movement, that he saw about him. He was again prostrated by severe illness, and again his wonderful constitution triumphed over disease, and he was spared to write one of the most delightful of all his books—*Præterita*—which pictures his true inner self in its modesty and gentleness and faith. Ruskin's sad marriage and unmarried life with the beautiful woman who afterward became the wife of John Everett Millais, the painter, is a story that he omits to tell, and that need only be referred to here.

Ruskin has not said the final word concerning art, even if he has said many that stand as final truth; he certainly has not said a final word as to social conditions in an age and world of steamships and railways, cities and manufactures, although he has presented noble ideals of thought for those who can grasp real conditions; but as a master of written language his place seems to be assured. His last volume is not his least beautiful one, and the charm of his character is more apparent because the friction was a thing of the past, and faithful friends made the decline of life pleasant to his sensitive spirit. The Ruskin Society, London, was founded in 1881; the Ruskin Reading Guild, in 1887. The Society publishes a quarterly magazine called *Igdrasil*, a title as strange and noncommittal as are most of Ruskin's own. He was D. C. L. of Oxford, and an honorary student of Christ Church College. In 1871 the degree of LL. D. was given to him by Cambridge. He founded a museum at Walkley, which was transferred to Sheffield in 1890. Here he placed part of his priceless library and treasures of art. He made his home in Brantwood, Coniston, in the lake country, where he died, and where, in accordance with his wish, he was buried. This paragraph, written at Coniston in one of his periods of illness, was happily unfulfilled, for love of moorland and wood and sleeping village did serve him to the last, while friendship gave what love had long withheld:

"Morning breaks, as I write, along those Coniston fells, and the level mists, motionless and gray beneath the rose of the moorlands, veil the lower woods and the sleeping village and the long lawns by the lake shore. Oh, that some one had but told me in my youth, when all my heart seemed to be set on these colors and clouds, that appear for a little while and then vanish away, how little my love of them would serve me when the silence of lawn and wood in the dews of morning should be completed; and all my thoughts should be of those whom, by neither, I was to meet more."

RUSSIA, an empire in northern Europe and Asia. The throne is hereditary in the dynasty of Romanoff-Holstein-Gottorp. The system of government is an absolute monarchy in which the legislative, executive, and judicial powers are united in the Emperor, or Czar, who is assisted by a Cabinet of Ministers, each of whom has charge of an executive department; by a Council of State, which examines and passes upon projects

of law submitted by the ministers; by a Ruling Senate, which watches over the general administration and superintends the judiciary; and by a Holy Synod, which directs ecclesiastical affairs. The Czar is the head of the Russian Church, which in its doctrines and ritual is identical with the Orthodox Greek, maintaining the relation of a sister Church with the patriarchates of Constantinople, Jerusalem, Antioch, and Alexandria.

The reigning Emperor of All the Russias is Nicholas II, born May 18, 1868, who succeeded his father, Alexander III, on Nov. 1, 1894; married, Nov. 26, 1894, to Alexandria, daughter of Ludwig IV, Grand Duke of Hesse. The heir presumptive is the Grand-Duke George, brother of the Czar, born May 9, 1871. The Committee of Ministers at the beginning of 1900 was as follows: Minister of the Imperial House and Imperial Domains, Gen. W. Freederiksz, appointed in 1898; Assistant Minister of Foreign Affairs, Count Muraviev, appointed in 1897; Procurator General of the Holy Synod, K. P. Pobedonosteff; Minister of the Interior, M. Sipyagin, appointed in November, 1899; Minister of Public Instruction, M. Bogolepoff, appointed in 1898; Minister of War, Gen. Kurupatkin, appointed in 1898; Minister of Marine, Vice-Admiral Tyrtoff; Minister of Agriculture and State Domains, A. S. Yermoloff; Minister of Justice, N. V. Muraviev; Minister of Finance, S. J. Witte; Minister of Railroads and Communications, Prince Hilkoff; Comptroller General, Gen. Lobko, appointed in November, 1899; Minister and Secretary of State for Finland, W. K. de Plehwe. The Grand-Dukes Vladimir, Alexis, and Michael are members of the Committee of Ministers, the president of which is J. N. Durnovo. After the sudden death of Count Muraviev, Count Lamsdorff was appointed on Aug. 7, 1900, director of the Russian Ministry of Foreign Affairs.

Area and Population.—The area in square miles and the population of the divisions of the empire are given in the following table:

DIVISIONS.	Area.	Population.
European Russia	1,902,302	94,215,415
Poland	49,159	9,455,043
Finland	144,255	2,483,249
Caucasus	86,661	3,732,556
Transcaucasia	94,182	5,516,139
Steppes	906,073	3,451,885
Turkestan	257,134	2,898,076
Transcaspien	214,237	872,193
Western Siberia	870,818	3,367,576
Eastern Siberia	3,044,513	1,992,321
Amur region	888,630	339,127
Sakhalin	29,336	23,166
Caspian Sea	169,381	.....
Russians in navy, etc. ....	.....	42,009
Total	8,660,895	128,932,173

The density of population is 193 to the square mile in Poland, 51 in Russia proper, 64 in Transcaucasia, 43 in northern Caucasus, 20 in Finland, 15 in Turkestan, 4 on the steppes, 4 in western Siberia, 2 in the Transcaspien territory, 1 in Sakhalin, 0.7 in eastern Siberia, and 0.3 in the Amur territory. In Russia proper there are 102.8 women to 100 men; in Poland, 98.6; in Finland, 102.2; in the Caucasus, 89.5; in Siberia, 93.7; on the steppes, 89.4; in the Transcaspien territory and Turkestan, 83; in the whole empire, 99.8. The immigration of Russians, including Jews, into the United States from 1873 to 1897 inclusive was 722,472. In the seven years from 1891 to 1897 it was 292,032 from Russia proper, 97,994 from Russian Poland, and 24,977 from Finland. The emigration from Russia in Europe to Siberia has grown from 26,000 in 1888 to about 150,000

a year. In 1896 the net immigration of foreigners into the Russian Empire was 47,701, and in 1897 it was 79,343; the net emigration of Russians was 75,118 in 1896 and 86,875 in 1897.

The Government appropriations for education in 1899 amounted to 51,062,842 rubles, of which 4,108,045 rubles were for universities and 9,390,055 rubles for intermediate schools. The universities are St. Petersburg, with 2,634 students; Moscow, with 3,693; Kazan, with 781; Kharkoff, with 1,059; Odessa, with 492; Kieff, with 2,558; Warsaw, with 1,085; Yuriev, with 1,326; and Tomsk, with 477. There are 177 gymnasias, with 51,582 pupils; 58 progymnasias, with 6,510; 104 real-schulen, with 24,279; 67 normal schools, with 6,334; 159 girls' gymnasias, with 44,795; 174 girls' progymnasias, with 22,767; 9 girls' middle schools, with 432; 4 girls' normal schools, with 366; 4 technical military and naval schools, with 936; 6 military academies, with 3,502; 25 cadet corps, with 8,118; 65 Cossack gymnasias, with 2,446; 22 Cossack girls' gymnasias, with 1,268; and 11 agricultural schools, with 1,449. The Ministry of Railroads maintains 11 technical schools and the Ministry of Finance 16 commercial schools. The institution of the Empress Marie provides for 10 gymnasias and 34 institutes. Of the elementary schools under the direction of the Ministry of the Interior, nine tenths are supported by the local authorities, a few by private individuals, and the rest by the Imperial Government. They numbered 32,708 in 1896, with 53,215 male and 16,768 female teachers and 1,775,861 male and 564,073 female pupils. The Ministry of War had charge of 10,270 schools, with 13,186 male and 363 female teachers and 252,373 male and 48,720 female pupils. Other ministries supervised over 500 schools, and 402 schools, with 7,311 male and 12,364 female pupils, belonged to various foundations, while the Holy Synod had 34,836 primary schools, with 24,185 male and 4,893 female teachers and 910,760 male and 205,732 female pupils. The religious seminaries of the Holy Synod were 55 in number. The training schools for teachers numbered 78, with 4,867 male and 366 female pupils.

Finances.—The ordinary revenue for 1898 amounted to 1,684,854,000 rubles. The yield of direct taxes was 41,069,000 rubles from land and forests, 48,167,000 rubles from trade licenses, and 14,624,000 rubles from a 5-per-cent. tax on capital. Indirect taxes produced 289,573,000 rubles from spirits, 37,461,000 rubles from tobacco, 58,562,000 rubles from sugar, 30,375,000 rubles from matches, naphtha, and other exciseable articles, 218,910,000 rubles from customs, 36,957,000 rubles from stamps, 25,907,000 rubles from transfer duties, and 23,431,000 rubles from passports, railroad taxes, and others. The income from state monopolies was 4,085,000 rubles from mining, 13,821,000 rubles from the mint, 27,406,000 rubles from the post office, 17,175,000 rubles from telegraphs, and 102,164,000 rubles from the sale of spirits. The income from state domains was 16,740,000 rubles from rents, 836,000 rubles from sales of lands, 41,473,000 rubles from the Crown forests, 11,307,000 from the Crown mines, 348,206,000 rubles from railroads, 14,247,000 rubles from Crown capital and banking operations, and 2,372,000 rubles from the share of the Crown in private railroads. The payments of peasants for the redemption of land were 38,018,000 rubles from liberated serfs and 48,134,000 rubles from Crown peasants. The receipts from miscellaneous sources were 12,430,000 rubles for railroad debts, 32,550,000 rubles for Crown debts, 16,291,000 rubles of aid from municipalities, 5,002,000 rubles of military contributions, and 7,560,000 rubles from various sources.

The actual expenditure in 1898 amounted to 1,358,276,000 rubles for all ordinary purposes. The debt service took 273,514,000 rubles, of which 107,522,000 rubles were for railroad debts. The expenses of the higher institutions of the state were 2,840,000 rubles; of the Holy Synod, 20,436,000 rubles; of the imperial house, 12,740,000 rubles; of the Ministry of Foreign Affairs, 5,018,000 rubles. The expenditures of the Ministry of War were 303,277,000 rubles, out of which 19,580,000 rubles went for rearmament and food stores and 4,819,000 rubles for the Transcaspiian Railroad. The navy cost 67,289,000 rubles for maintenance. The expenses of the Ministry of Finance were 214,332,000 rubles, including 1,325,000 rubles for loans to railroad companies, etc. The expenditures of the Ministry of Domains and Agriculture were 35,615,000 rubles; of the Ministry of the Interior, 80,176,000 rubles; of the Ministry of Public Instruction, 26,921,000 rubles. The Ministry of Ways and Communications expended 264,995,000 rubles, out of which 187,992,000 rubles were for the exploitation of state railroads and 41,137,000 rubles for a new feeding line and improvements. The expenses of the Ministry of Justice were 42,335,000 rubles. The cost of state control was 7,086,000 rubles, of which 3,480,000 rubles were for railroads. The expense of the imperial studs was 1,699,000 rubles. The ordinary expenditures have increased 308,812,000 rubles since 1888, owing to the gradual purchase of railroads, the additional expenses being for railroad debts, guarantees to shareholders, improvements, and the cost of exploitation and control. This increase has been balanced by additional revenue from railroads. The cost of building new lines forms part of the extraordinary budget. The extraordinary receipts in 1898 amounted to 87,818,000 rubles, of which 77,655,000 rubles were from state loans, 5,101,000 rubles from perpetual deposits at the Bank of Russia, 3,476,000 rubles from payment of debts by railroads, 1,540,000 rubles from sales of state property, and 46,000 rubles from other sources. The extraordinary expenditures were 114,283,000 rubles for building new railroads and increase of rolling stock, 138,509,000 rubles for payment of state debt in the conversion operation, 190,000 rubles for operations for purchase of railroads, 24,800,000 rubles for payment of railroad bonds, and 136,153,000 rubles to the state bank, the nobles' bank, and other outlay. The revised accounts make the total ordinary revenue for 1898 1,584,774,000 rubles and the ordinary expenditure 1,361,575,000, leaving a surplus of 223,199,000 rubles, but the deficit of 325,816,000 in the extraordinary budget left a minus balance of 102,617,000 rubles. For the six years ending with 1898 the ordinary budget shows a surplus of 985,833,000 rubles, the extraordinary budget a deficit of 927,384,000 rubles, giving a balance of 58,449,000 rubles in receipts over expenditures for the entire period.

The estimates for 1899 made the total ordinary revenue 1,469,128,203 rubles, the direct taxes being reckoned at 113,554,631, indirect taxes at 667,182,457 rubles, receipts from domains and railroads at 396,298,198 rubles, sale of spirits at 92,141,000 rubles, reimbursement of railroad and other loans at 58,870,906 rubles, receipts from mint, mines, posts, and telegraphs at 52,875,800 rubles, state peasants' redemptions of land at 40,433,597 rubles, liberated serfs' redemptions at 37,260,403 rubles, war contributions at 3,947,113 rubles, sale of domains at 902,302 rubles, and miscellaneous receipts at 5,652,796 rubles. The ordinary expenditure for 1899 was estimated at 1,462,650,233 rubles, the principal items showing an increase, being 318,691,639 rubles for war, 233,381,888 rubles for fi-

nance, 293,174,883 rubles for communications, 83,065,000 rubles for the navy, 28,761,171 rubles for public instruction, 37,022,627 rubles for agriculture and domains, 21,199,144 rubles for the Holy Synod, and 44,944,651 rubles for justice. The extraordinary expenditure for 1899 was estimated at 109,073,413 rubles, of which 27,154,350 rubles were for the Siberian Railroad, 3,706,256 rubles for works connected with the same, 24,777,782 rubles for other railroads, 46,864,525 rubles for rolling stock, and 6,570,500 rubles for the expenses of railroad debts to be incurred. The only extraordinary revenue foreseen was 4,000,000 rubles from deposits in bank, which left 98,604,443 rubles of deficit to be met. The total ordinary revenue for 1900 was estimated at 1,593,745,680 rubles, the yield of direct taxes being reckoned at 120,365,517 rubles, indirect taxes at 725,945,150 rubles, profits of mint, mines, posts, and telegraphs at 55,585,800 rubles, of the sale of spirits by the state at 118,102,000 rubles, of railroads and domains at 422,748,423 rubles, sales of domains at 578,139 rubles, redemption of land by state peasants at 39,953,150 rubles, by liberated serfs at 37,763,841 rubles, reimbursement of loans at 63,541,018 rubles, war contributions at 3,400,000 rubles, and miscellaneous receipts at 5,762,633 rubles. The expenditure on interest and capital of the state debt for 1900 was set down as 223,039,555 rubles; on railroad obligations, 51,686,609 rubles; cost of higher institutions of the state, 3,007,995 rubles; of the Holy Synod, 23,559,685 rubles; expenses of Ministry of the Imperial Household, 12,899,514 rubles; of Ministry of Foreign Affairs, 5,267,735 rubles; of the army, 324,343,686 rubles; of the navy, 86,628,015 rubles; of the Ministry of Finance, 281,489,304 rubles; of the Ministry of Agriculture and Domains, 40,997,092 rubles; of the Ministry of the Interior, 85,938,484 rubles; of the Ministry of Public Instruction, 33,180,829 rubles; of the Ministry of Railroads, 322,287,968 rubles; of the Ministry of Justice, 46,515,736 rubles; of the state control, 7,721,623 rubles; of the direction of studs, 1,877,849 rubles; unforeseen and war expenses, 14,000,000 rubles, against a provision of 20,000,000 rubles for such contingencies in the previous year's estimates. The total expenditures foot up 1,564,441,679 rubles, and the extraordinary expenditures are estimated at 192,945,424 rubles, offset by 3,000,000 rubles interest on deposits in the national bank and the estimated surplus in the ordinary budget, which leave a deficit of 160,641,423 rubles to be covered. These extraordinary expenditures are 25,195,258 rubles for the Siberian Railroad, 3,418,524 rubles for works connected with it, 30,573,550 rubles for other railroads, 43,758,092 rubles for rolling stock for the Siberian and other railroads, 85,000,000 rubles for loans to railroad companies, and 5,000,000 rubles for negotiations.

Between 1860, when the revenue of the Imperial Government amounted to 353,000,000 rubles, and 1893, when it showed an increase of 450 per cent. over that figure, the financial system has undergone a complete change. From 1866 to 1877 the average annual increase in the revenue was 21,000,000 rubles, of which 12,000,000 rubles was obtained from indirect and 5,400,000 rubles from direct taxation, while the income from royalties and state property was nearly stationary. By this time it was found that new taxes that were imposed ceased to respond to the requirements of the treasury, and even the payments of the peasants for redemption of land were too heavy to be paid promptly. The Government was obliged to abolish some of the direct taxations, such as the poll tax, and to look for new sources of income. A small tax was put on the interest of capital, the

excise duties on spirits and sugar were raised, and some necessities were taxed for the first time. The direct taxation could yield no more, and even indirect taxes seemed to have passed the limit of elasticity when M. Vishnegradsky became Minister of Finance in 1887. He refrained from taxing severely the rich capitalists and large manufacturers and the landowners, and conceived the plan of making the state itself a capitalist institution. The annual increase of revenue from 1877 to 1887 was 25,000,000 rubles. During his five years of office, M. Vishnegradsky began the nationalization of railroads and developed the royalties and state properties, with the result that, while the indirect taxation yielded an average yearly increase of 12,500,000 rubles, the royalties and state properties gave one of 18,000,000 rubles. The net increase in the five years averaged 27,000,000 rubles annually. M. de Witte, who entered upon office in 1892, gave a further powerful impetus to the development of royalties and state property, and in that way completed the change in the character of the Russian financial policy. In the six years from 1892 to 1898 the average annual increase of revenue was over 100,000,000 rubles. The revenue from state railroads, which amounted in 1887 to scarcely 1,500,000 rubles, rose to 18,000,000 rubles in 1887, to 277,000,000 in 1897, and to 348,000,000 in 1898. The general income from royalties and state property rose from 51,000,000 rubles in 1877 to 103,000,000 rubles in 1887, and to 592,000,000 rubles in 1898. The tendency to make the treasury self-supporting and independent of taxation is growing constantly stronger. The first steps have been taken toward the creation of a petroleum monopoly. The state monopoly of the sale of spirits in certain provinces gave the treasury in 1898 an income of 102,000,000 rubles. The Russian peasantry, forming nearly nine tenths of the population, are directly affected only by the land tax and the payments for redemption of land, giving less than 10 per cent. of the revenues of 1898. These taxes are about 10 rubles a year for each family possessing 12½ acres, and yet the arrears of payments for redemption of land have gone on increasing in spite of coercive measures adopted to enforce payments. In the five years from 1871 to 1875 inclusive the arrears averaged 30,000,000 rubles annually, and in the period from 1891 to 1895 they had grown to 98,000,000 rubles, in 1897 to 105,000,000 rubles, and in 1898 to 116,000,000 rubles. In 1899 M. de Witte, besides lessening the duty on metals, endeavored to make direct payments by the peasants lighter. The exigencies of the Chinese situation and other untoward circumstances compelled the Government to return to the former taxation, even to increase it in some instances, and to reduce expenditures on education and public works. In 1899 the excess of ordinary revenue over ordinary expenditure reached the figure of 209,740,545 rubles, sufficient to balance the extraordinary expenditure and leave a net surplus of about 84,000,000 rubles, notwithstanding a bad state of trade and a general financial depression.

The amount of the state debt on Jan. 1, 1899, was 6,108,792,117 rubles. On Jan. 1, 1900, it was 6,150,134,874 rubles, consisting of 413,785,133 rubles of gold debt paying 3 per cent., 148,382,812 rubles of gold and 6,250,000 rubles of paper debt paying 3½ per cent., 85,247,400 rubles payable in currency and bearing 3.79 per cent. interest, 684,234,149 rubles of consolidated gold 4-per-cent. debt and 2,438,753,830 rubles payable in currency, 247,370,000 rubles of 4½-per-cent. currency debt, 73,255,800 rubles payable in gold and 187,137,538 rubles in paper paying 5 per cent., 139,001,195

rubles of other currency debts, 101,754,939 rubles of 3-per-cent. gold bonds, 1,616,821,278 rubles of 4-per-cent. bonds payable in gold and 1,269,300 rubles payable in paper, and 6,871,500 rubles of 5-per-cent. gold bonds. During the ten years ending in 1897 the state debt payable in gold increased 762,921,505 rubles, while that payable in paper decreased 65,500,832 rubles, and the interest paid in gold increased 23,230,273 rubles, while the interest of the paper debt decreased 15,505,113 rubles; gold annuities also increased 350,558 rubles and currency annuities decreased 16,364,464 rubles, the whole movement showing a growth of 1,078,881,425 rubles of debt reckoned in paper, with an increase of 19,340,296 rubles in the annual interest charge, but a decline of 15,838,627 rubles in the annuities payable each year. Between 1889 and 1897 debts bearing from 4½ to 6 per cent. interest were converted into the 4-per-cent. debt, 944,790,858 rubles payable in gold and 1,654,220,600 rubles payable in paper, the total sum amounting in paper to 3,071,406,887 rubles, reckoning gold at the legal rate of 150. The cost of conversion was 106,301,507 rubles in gold and 129,307,625 rubles in paper, besides 265,301,277 rubles in gold and 31,278,167 rubles in paper, to cover paper currency, the total amounting to 717,989,968 rubles. New loans concluded are a gold debt of the nominal amount of 910,448,375 rubles and a silver debt of 1,674,000,000 rubles, together equal to 3,039,672,562 rubles, for the conversion operation, and there were 391,233,647 rubles in gold and 164,004,800 rubles in paper, together equal to 755,855,270 rubles in silver or paper, for the same purpose. The balance in the treasury on Jan. 1, 1899, was 545,640,652 rubles, from which must be deducted disbursements already provided for, leaving in ready cash 134,885,670 rubles.

The debts due to the state on Jan. 1, 1898, were 290,108 rubles in paper of military contributions from Khiva, 175,626,072 in gold of military contributions from Turkey, 86,568,697 in gold and 123,832,570 rubles in paper from railroads, 1,531,392,928 rubles from peasants for redemption of land, 91,518,196 rubles in paper from local treasuries, 83,105,961 rubles in gold from the land bank for the nobility, and 6,086,346 rubles in gold and 129,490,458 rubles in paper from various debtors; total value in paper, 2,403,644,873 rubles. The famine, pension, military, philanthropic, special agricultural, scientific prize funds and others in the treasury amounted to 314,994,844 rubles. The interest and capital payments for state and railroad debts in 1900 amounted to 274,726,164 rubles, of which 60,052,754 rubles were on external loans, 6,554,839 rubles on external bonds, 30,925,306 rubles on internal loans, 102,355,601 rubles on obligations of state railroads, 20,608,175 rubles on obligations of private railroads to be repaid by them, 2,430,000 rubles for payments of interest not yet called for, and 112,880 rubles for banking expenses, all calculated in paper rubles at the rate of 1½ for 1 gold ruble.

The reform of the Russian currency began in 1895, when the Minister of Finance announced that the treasury and the railroads would pay out gold at a certain ratio to be determined from time to time between the paper currency and gold coins. It was first fixed at the rate of 1 ruble 48 copecks for the gold ruble, and before the end of the year at 1 ruble 50 copecks in paper or silver or 15 paper rubles for the new imperial, which contains two thirds as much gold as the old imperial of 15 rubles. The ratio was confirmed in the following year, and the continual and enormous fluctuations in the exchange value of the paper ruble were arrested. In 1897, instead of marking the new

imperial 10 rubles, the mint stamped it 15 rubles and the half-imperial 7 rubles 50 copecks, and a new 5-ruble coin of one third the size of an imperial was minted. A law was passed on Sept. 10, 1897, authorizing the Bank of Russia to issue paper currency according as the needs of commerce are indicated on the condition that a reserve in gold must be held against half the total issue up to 600,000,000 rubles and covering the whole of it beyond that amount. The treasury accumulated gold before gold payments were ventured upon, and from time to time since, receiving gold for the foreign loans placed in Paris and elsewhere. In 1898 the accumulations of gold in the treasury and in the state bank amounted to 1,315,000,000 rubles, exceeding the entire note circulation by 316,000,000 rubles. Of the accumulated gold, 575,000,000 rubles, equal to 862,500,000 rubles in paper, is held as a guarantee fund for the protection of the paper currency, which has been reduced 122,300,000 rubles since 1896. In January, 1900, the amount of paper in circulation was 630,000,000 rubles, against 1,046,500,000 rubles in 1887; amount of gold at the treasury and in the bank, 1,566,400,000 rubles in paper value; amount of silver in circulation, 220,500,000 rubles; guarantee fund, 927,000,000 rubles. The old gold coinage, minted between 1896 and 1897, amounted to 183,305,630 rubles. Since the weight of the imperial was reduced a third the mints coined in the first two years, 1897 and 1898, gold coins of the paper value of 595,467,647 rubles, silver 900 fine of the value of 105,618,391 rubles, and 4,800,006 rubles of base coins; total, 705,885,244 rubles. The gold at the bank and treasury in January, 1899, was 927,000,000 rubles; gold in circulation, 639,400,000 rubles; silver at the bank and treasury, 56,300,000 rubles; silver in circulation, 164,200,000 rubles; paper at the bank and treasury, 112,700,000 rubles; paper in circulation, 517,300,000 rubles.

The Army.—Out of 870,000 young men who reported for service on reaching the age of twenty in 1898 and passed the physical examination, 287,000 were taken into the active army and the navy. Of the rest part were assigned to the reserve and part to the *zapas*, or secondary reserve. In 1900 the annual contingent of recruits was increased to 197,000. In the active army a soldier in European Russia serves nominally five and really four years, then thirteen years in the reserve and five in the *zapas*; in the Caucasus, three years in the active army and fifteen in the reserve; in Asia, seven years in the active army and six in the reserve. The *opolchenie*, or militia, has been reorganized, and training is provided for those who have not served in the army, and the first division, composed of men who have been in the army and others who are able-bodied, is intended to supplement the reserves of the army in case of war, while the second division, composed of men who have served in the first and men freed from army service for some infirmity or because they are the support of families, can only be organized as militia for national defense. The Cossacks of the Don, Kuban, Terek, Astrakhan, Orenburg, Ural, Siberia, Semirychensk, Transbaikal, Amur, and Usuri are bound to provide their own horses, arms, and clothing in return for various privileges. Besides those in active service, a second class must stand ready with horses and arms and a third class with arms. The Russian army is composed of 29 army corps, including a corps of guards, 1 of grenadiers, 2 corps in the Caucasus, 2 in Turkestan, and 2 cavalry corps. No statistics of the strength of the Russian army are made public. The approximate strength of the active field army is 27,400 officers and 1,269,000 men,

composed of 19,300 officers and 984,000 men in the infantry, 3,900 officers and 120,000 men in the cavalry, 3,000 officers and 100,000 men in the artillery, 800 officers and 40,000 men in the engineers, and 400 officers and 25,000 men in the train; strength of the fortress troops, 4,000 officers and 262,000 men, composed of 2,500 officers and 170,000 men in the infantry, 1,200 officers and 82,000 men in the artillery, and 301 officers and 10,000 men in the engineers; reserve of the active army, 14,300 officers and 789,000 men, composed of 10,700 officers and 650,000 men in the infantry, 2,500 officers and 100,000 men in the cavalry, 900 officers and 30,000 men in the artillery, and 200 officers and 9,000 men in the engineers; recruiting reserve, 5,900 officers and 346,000 men, composed of 4,400 officers and 270,000 men in the infantry, 800 officers and 40,000 men in the cavalry, 600 officers and 30,000 men in the artillery, and 100 officers and 6,000 men in the engineers; militia, 10,400 officers and 740,000 men, composed of 9,500 officers and 686,000 men in the infantry, 350 officers and 22,000 men in the cavalry, 450 officers and 28,000 men in the artillery, and 100 officers and 4,000 men in the engineers; frontier guards, 1,000 officers and 34,000 men; total war strength of the Russian army, 63,000 officers and 3,440,000 men.

The Navy.—The effective navy on Jan. 1, 1900, consisted of 3 first-class battle ships in the Baltic, with 2 building, and 2 in the Black Sea, where 1 was building; 10 of the second class in the Baltic, and 4 more building, and 5 in the Black Sea; 1 of the third class in the Baltic; 12 coast guards in the Baltic and White Sea, and 1 under construction; 10 armored cruisers in the Baltic, with 2 building; 3 second-class cruisers, and 3 more building, in the Baltic; 1 third-class cruiser in the Baltic, 1 in the Black Sea, and 3 unfinished in the Baltic; and 30 gunboats in the Baltic and White Sea, 2 more building, and 8 afloat in the Black Sea. There are 12 destroyers and 12 more not yet complete, and 50 submarine boats are projected, and some of them begun. Of torpedo boats Russia has 39 of the first class and 6 not quite finished, 41 of the second class, and 101 of the third class. The inland water communications permit these to be used either in the North Sea or in the Euxine. The *Oslabya* and *Peresyvet*, launched in 1898, displacing 12,674 tons, battle ships that serve also as cruisers, carrying 4 10-inch guns in turrets, 10 6-inch quick-firing guns in casemated batteries and 1 in the bow, and 20 3-inch quick firers, have Harvey steel armor, Belleville boilers giving a speed of 18 knots, and coal bunkers for a long cruise. The *Pobieda* is a sister ship. The *Retvisan*, of 12,700 tons, armed with 4 12-inch guns in turrets and 12 6-inch and 20 3-inch quick firers, resembles the British *Majestic*, and the *Tsarevich* is similar. The *Borodino*, *Alexander III*, and *Orel* may be of either of these types. The *Kniaz Potemkin* and *Tavrichesky*, of 12,480 tons, are of the same size as the *Tri Svitliia*, and combine the merits of that vessel, which is of the British *Trafalgar* type, with those of the *Poltava* class, which includes the *Petrovavlovsk* and the *Sevastopol*. The *Poltava*, of 10,960 tons, launched in 1894, carries 4 12-inch guns in turrets, 8 6-inch quick firers in 4 turrets on the upper deck, 4 other 6-inch, and 34 smaller quick-firing and machine guns. The same arrangement is followed in the smaller *Rostislav*, of 8,880 tons, which has 10-inch breechloaders and a smaller quick-firing armament, with no guns mounted on the main deck. The protected cruisers *Diana*, *Pallada*, *Aurora*, and *Bogatyr*, launched in 1898 and 1899, carrying 8 6-inch, 20 3-inch, and smaller quick firers, and steaming 20 knots with engines of 11,610 horse

power, will be excelled by the Waryag and Boyarin, one built in Philadelphia and the other in Copenhagen, which have the same displacement (6,500 tons), a more powerful armament, consisting of 12 6-inch, 12 3-inch, and 6 smaller quick firers, and engines of 20,000 horse power, giving a speed of 23 knots, advantages obtained, however, at the cost of the cruising radius. The armored cruiser Rurik, launched in 1892, having a displacement of 10,933 tons, is protected at the water line by 10 inches of armor for four fifths of the vessel's length, carries a powerful armament, and has capacity for 2,000 tons of coal, sufficient for a cruise of 20,000 miles at a speed of 10 knots. The Gromovoi, of 12,338 tons, is an improvement on the Rossia, of 12,130 tons, launched in 1896, having most of her guns in armored casemates and a more powerful quick-firing armament, consisting of 20 3-inch and 24 smaller guns in addition to the 16 6-inch quick firers, which both vessels have besides 4 8-inch guns in the main battery. The Bayan and Askold, of 7,800 tons, built in France, resemble the French Desaix, their armament consisting of 2 8-inch, 8 6-inch, 20 3-inch, and 7 smaller quick firers. A recent type of coast-defense armor clads is seen in Admiral Ushakoff and Admiral Seniavin, of 4,126 tons, having 10-inch armor, a strong battery, consisting of 4 9.4-inch guns and 4 4.7-inch and 36 smaller quick firers, and a speed of 16 knots. The still later General Admiral Apraxin differs only in having 3 10-inch in the place of 4 9.4-inch guns in the turrets. A new ship will be of greater strength, having a displacement of 6,000 tons. A new type of river gunboat is exemplified in the Gilyak, built for service in the Chinese rivers, with 10 feet draught, carrying 1 4.7-inch and 5 3-inch quick firers, and having a displacement of 1,300 tons. In the naval budget of 1901, amounting to 97,000,000 rubles, about 37,000,000 rubles go for construction and armament. Besides the 3 battle ships of 13,516 tons, the Borodino, Orel, and Alexander III, ordered to be built at St. Petersburg, a fourth has been authorized, the Prince Suvaroff. A new coast-defense armor clad of the type of the Admiral Apraxin will be built, to have a displacement of 5,000 tons; also a cruiser of 3,000 tons for the Pacific, a coal transport of 7,200 tons, a new imperial yacht, and 2 torpedo boats, 60 feet long, for escorting the Czar's yachts. At Nikolaieff, on the Black Sea, will be constructed a first-class cruiser of 6,250 tons and 6 torpedo vessels of 350 tons each; at Sebastopol, another cruiser of 6,250 tons and 12 torpedo boats for Port Arthur. The new vessels will carry 12.4-inch and 8.45-inch guns, and numerous 6-inch quick firers.

Commerce and Production.—The crops of cereals and pulse in European Russia in 1898 amounted to 2,642,190,000 pounds of 36 pounds, the average for the preceding five years having been 2,737,297,000 pounds. The wheat crop was nearly 10 per cent. above the average, and barley and minor crops were better, but in rye and oats there was a falling off. The main crop is rye, of which 986,970,000 pounds were grown in 1898; of wheat, 555,337,000 pounds; of oats, 496,153,000 pounds; of barley, 338,542,000 pounds; of buckwheat, millet, mixed grain, peas, lentils, and beans, 265,188,000 pounds. In Poland, 36,039,000 pounds of wheat, 111,696,000 of rye, 25,892,000 of barley, 49,192,000 of oats, and 16,929,000 of various crops were produced; in northern Caucasasia, 86,813,000 pounds of wheat, 8,640,000 of rye, 33,372,000 of barley, 11,002,000 of oats, and 29,271,000 of various crops; on the steppes, 24,829,000 pounds of wheat, 1,247,000 of rye, 3,627,000 of barley, 7,464,000 of oats, and 10,245,000 of various crops; in Siberia, 60,073,000 pounds of wheat, 35,087,000 of rye,

6,518,000 of barley, 45,420,000 of oats, and 4,107,000 of various crops. The total production of wheat for the empire, as shown by these figures, was 763,091,000 pounds, compared with an average of 701,321,000; of rye, 1,143,640,000 pounds, compared with 1,219,392,000; of barley, 407,951,000 pounds; of oats, 609,231,000 pounds; of various and mixed grains and pulse, 325,740,000 pounds. The crop of potatoes in 1898 was 1,037,358,000 pounds in European Russia, 384,589,000 in Poland, 22,599,000 in northern Caucasasia, 20,279,000 in Siberia, and 1,838,000 on the steppes; total, 1,466,663,000 pounds, compared with an average of 1,335,077,000 for the five years last preceding. In 1899 there was a wheat crop of 500,869,000 pounds in Russia proper, 33,015,000 in Poland, and 84,533,000 in north Caucasasia; a rye crop of 1,170,698,000 pounds in Russia, 110,814,000 in Poland, and 9,705,000 in north Caucasasia; a barley crop of 247,911,000 pounds in Russia, 25,892,000 in Poland, and 26,461,000 in north Caucasasia. The crop of flax in Russia in Europe for 1898 was 694,348 tons, and of linseed 27,655,500 bushels on 5,173,000 acres; of hemp, 221,000 tons of fiber and 13,293,500 bushels of seed on 1,904,300 acres; of hops, 1,936 tons. The crop of hay was 33,912,000 tons in Russia, 1,911,000 tons in Poland, 4,975,000 tons in northern Caucasasia, 6,670,300 tons in Siberia, and 2,262,400 tons on the steppes; total, 49,730,700 tons, from 92,994,000 acres. The wine made in Transcaucasasia in 1899 was 17,043,000 gallons from 250,075 acres of vineyards, and 10,265 acres there yielded 3,392 tons of tobacco in 1897, while in Kuban 29,400 acres yielded 12,830 tons. There are large plantations of tea in Transcaucasasia, and silk is also produced. In Transcaucasasia 20,400 tons of cleaned cotton were produced in 1898. The Ministry of Agriculture has 68 experimental farms in different parts of the empire. More than a third of the area of European Russia is covered with forests, which have an extent of 422,307,000 acres, while in Poland there are 6,706,000 acres. Finland has 50,498,000 acres, and Caucasasia 18,666,000 acres. The total forest area under the management of the Government in 1898 was 306,739,983 acres in the European dominions and 326,981,305 acres in Asiatic Russia. In European Russia 96,873,300 acres of forest have been declared to be preservative of rivers, and in such areas the Government allows no felling of timber that can diminish their protective value. About 20,000,000 acres of Siberian forests are to be exploited for the Government, and at the mouth of the Ob a port will be established for the shipment of the timber from these Crown forests, which are in Tomsk and Tobolsk. Manufacturing industries have made rapid strides in some parts of Russia and in Poland, especially the iron, cotton, naphtha, and sugar industries, and the manufacture of paper, leather, various textiles, ceramics, chemical products, tobacco, wood wares, spirits, beer, etc. There were 39,232 industrial establishments reported in 1896, employing 1,742,181 work people, and producing goods valued at 2,745,149,000 rubles a year. The production of refined sugar in 1898 was 754,758 tons.

The imports of Russia in 1898 had a total value of 562,013,000 rubles; exports, 709,084,000 rubles. The imports of food substances were valued at 69,803,000 rubles, and exports at 433,496,000 rubles; imports of raw and partly manufactured articles at 302,134,000 rubles, and exports at 238,397,000 rubles; imports of animals at 1,511,000 rubles, and exports at 16,848,000 rubles; imports of manufactured goods at 188,565,000 rubles, and exports at 21,243,000 rubles. The exports of wheat were 57,047,464 hundredweight; of rye, 21,553,718 hundredweight; of barley, 34,108,714 hundred-

weight; of corn, 14,886,321 hundredweight. The exports of eggs, 1,831,000,000 in number, were valued at 31,020,000 rubles. The value of cereals and flour exported was 370,463,000 rubles; of dairy produce, including eggs, 38,325,000 rubles; of spirits, 1,774,000 rubles; of sugar, 7,176,000 rubles; of timber and wood wares, 57,715,000 rubles; of linseed, grass seed, and other seeds, 26,906,000 rubles; of flax, 57,786,000 rubles; of hemp, 10,885,000 rubles; of tallow, 507,000 rubles; of bristles, hair, and feathers, 7,716,000 rubles; of wool, 6,894,000 rubles; of furs, 4,020,000 rubles; of woolen goods, 2,216,000 rubles; of cotton goods, 2,967,000 rubles; of naphtha and naphtha products, 25,630,000 rubles. The export of illuminating oil increased from 15,998,000 hundredweight in 1894 to 17,349,020 hundredweight in 1898; of lubricating oil, from 2,092,000 to 3,382,900 hundredweight. The number of horses exported in 1897 was 58,300; the export of oil cake was 12,769,000 rubles in value.

The imports and exports by the frontier of Asia are not included in the above figures excepting those from the Black Sea coast of the Caucasus. The imports amounted to 49,043,000 rubles and the exports to 21,042,000 rubles. The main part of this trade is by the frontier of Manchuria. The imports of food substances, principally tea, were 30,888,000 rubles in value, and exports 7,888,000 rubles; imports of raw and partly manufactured articles were 10,897,000 rubles, and exports 2,513,000 rubles; imports of manufactured goods were 5,453,000 rubles, and exports 10,149,000 rubles; imports of animals were 1,805,000 rubles, and exports 492,000 rubles.

The chief imports of Russia are raw cotton, raw metals, machinery, raw wool, metal goods, tea, leather, coal, wines, silk, textile goods, chemicals, colors, gum and resin, fish, fruits and nuts, coffee, cotton goods, watches and clocks, and tobacco. The value of imports from Germany in 1898 was 202,117,000 rubles; from Great Britain, 113,066,000 rubles; from the United States, 49,430,000 rubles; from France, 27,087,000 rubles; from Austria-Hungary, 24,123,000 rubles; from Belgium, 23,621,000 rubles; from China, 22,636,000 rubles; from Egypt, 22,636,000 rubles; from Italy, 10,149,000 rubles; from the Netherlands, 9,775,000 rubles. The value of the exports to Germany was 179,254,000 rubles; to Great Britain, 140,447,000 rubles; to the Netherlands, 79,072,000 rubles; to France, 63,424,000 rubles; to Italy, 54,447,000 rubles; to Austria-Hungary, 41,652,000 rubles; to Belgium, 28,788,000 rubles; to Turkey, 13,956,000 rubles; to Roumania, 12,675,000 rubles; to Denmark, 9,839,000 rubles.

Many parts of the Russian Empire are exceedingly rich in minerals. The coal and iron industries have made great progress. Duties have been placed on imported coal to increase the consumption of the domestic product. The gold production of the Urals has declined to a fraction of what it once was. Platinum is still produced there, and in increasing quantities. The gold mines of Siberia are becoming more productive. In order to increase their production much more by the introduction of modern methods and machinery and thus obtain a larger supply of the precious metal to support the gold standard, the Russian Government in 1900 granted to an English syndicate a concession of 8,200 square miles of auriferous land on the imperial property in the Nertchinsk region. In the Donetz region of European Russia, which is particularly rich in coal, Belgians have developed the coal mines and other industries, especially glass making. Large numbers of Belgian workmen took up their residence in the Donetz, and the prosperity of the Belgians awakened the

resentment of both the peasantry and the nobility who had sold their lands to Belgian capitalists without being aware of the wealth existing under the soil. In 1900 disturbances occurred from this cause.

On Aug. 5 the general tariff was raised on many articles as a temporary measure for providing means to defray the extraordinary expenses necessitated by the Chinese troubles. On flour, wine, beer, fruits, spices, tobacco, fish, and gums it was increased 50 per cent.; on coffee, boots and shoes, and lumber, 30 per cent.; on porcelain wares, fancy cutlery, gold watches, vehicles, linens, clothing, and ornamental metal wares, 20 per cent.; and 10 per cent. on a long list of articles. In order to check the rise in the price of naphtha due to trade combinations the Government determined to enter into competition with the merchants, requiring the lessees of the oil wells on the Crown lands of the Baku district to pay 40 per cent. of their rent in kind after 1901.

Navigation.—The number of vessels in the foreign trade entered at White Sea ports during 1898 was 712, of 395,262 tons; at Baltic ports, 5,809, of 3,554,879 tons; at ports of the Black Sea and the Sea of Azof, 4,426, of 665,611 tons; the number cleared at White Sea ports, 703, of 376,370 tons; at Baltic ports, 5,736, of 3,765,777 tons; at ports of the Black Sea and the Sea of Azof, 4,374, of 6,615,890 tons; total number entered, 10,947, of 4,615,752 tons; total number cleared, 10,813, of 10,758,037 tons. The ports of the Caspian were visited in 1896 by 18,055 vessels in the foreign and coasting trade, of 233,714 and 8,360,269 tons respectively; the Pacific ports of Vladivostok and Nikolaievsk by 347 vessels, of 313,531 tons. The number of coasting vessels that visited White Sea, Baltic, and Black Sea ports was 38,943, of 13,794,870 tons; and Caspian ports, 17,284, of 8,360,269 tons.

Railroads, Posts, and Telegraphs.—On July 1, 1899, there were 29,855 miles of railroad in operation in the Russian Empire, including 1,611 miles in Finland. The lines owned and operated by the Government had a total length of 16,414 miles; lines belonging to public companies, 9,365 miles; isolated and unconnected railroads, 1,091 miles; short local lines, 774 miles. The Siberian trunk line to Lake Baikal, 1,201 miles, was already in operation in 1898, and at the end of 1899 the continuation to Sryatsensk, 693 miles, was opened, establishing steam communication between St. Petersburg and the Pacific coast, the trains being for the present ferried across Lake Baikal. Other important railroads recently completed are the lines from Vologda to Archangelsk, 397 miles; from Tiflis to Kars, 186 miles; from Perm to Kotlas, 545 miles; from Sievalki by way of Augustovo to Grodno, 620 miles; from Tikhoryetskai to Tsaritsyn, 335 miles; from Khavi to Tashkend, 96 miles; and from Samarkand to Andijan, 335 miles. There are 28 lines in the empire connecting with each other, 16 of which, containing 60 per cent. of the mileage, are worked by the Government and the rest by public companies under the control of the Minister of Ways and Communications. The isolated lines are 7 in number. Whereas 76 per cent. of the network belonged in 1889 to companies, of which there were then 42, and the state had a deficit of 30,000,000 rubles in the railroad account, in 1899 the remaining 9 companies operated only 40 per cent. of the railroads, and the Government, by taking over the railroads, reached a balance in the railroad budget in 1895 and earned a net profit of 11,300,000 rubles in 1896, 12,500,000 rubles in 1897, and 12,100,000 rubles in 1898. The introduction of the zone tariff in 1894,

reducing the fares for long journeys by 60 per cent., increased receipts from passenger traffic by 18 per cent. in three years. In 1898 there were 70,877,406 passengers, 39 per cent. more than in 1894. The freight traffic increased from 69,848,000 tons in 1891 and 88,916,000 tons in 1894 to 97,170,728 tons in 1898. The gross income of the Government from railroads increased from 301,709,000 rubles in 1892 to 457,550,000 rubles in 1892. The net receipts in 1896 were 176,733,000 rubles, compared with 107,677,000 rubles in 1892. The capital cost to the state of its railroads up to the end of 1898 was 2,744,923,577 rubles. The expenses of the Government lines in 1898 were 157,366,602 rubles. The net receipts were 119,666,619 rubles. Deducting 110,635,698 rubles, interest on the debt incurred for the purchase of the railroads, the net profit of the Government was 9,030,921 rubles. The railroads operated by the subsidized companies had a length of 8,101 miles, including 516 miles leased from the Government, and 2,465 miles were under construction in 1897. The capital cost of the companies' lines was 1,005,145,885 rubles; receipts in 1896 were 140,224,306 rubles, and expenses 81,851,251 rubles, making the net receipts 58,973,055 rubles, from which 41,668,695 rubles of interest on capital is deducted to arrive at the net profits of the companies, which were 17,304,360 rubles. The debt of the companies to the state was reduced by additional transfers of railroads during 1897 from 819,170,204 rubles to 253,685,615 rubles on Jan. 1, 1898. The traffic of the Transcaspian Railroad is not included in the reports of the Ministry of Ways and Communications. It was built for military transport primarily, and is managed by the Ministry of War. The freight traffic increased from 292,500 tons in 1896 to 390,100 tons in 1897, the gross receipts from 5,449,030 rubles to 7,061,000 rubles. New lines will be built by the Government connecting Poltava with Kieff, Nishni-Novgorod with Romanovo, Zemethina with Kustarevka, and St. Petersburg with Kieff by way of Vitebsk and Mohileff. An Asiatic line is projected to run from Orenburg to Tashkend. The Manchurian Railroad, built to connect the trunk line of the Siberian Railroad with Vladivostok by a direct route across Manchuria from the Onon station in Transbaikalia, was undertaken by a company formed in 1896 under the auspices of the Russian Government. By arrangement with the Chinese Government a branch has been built from the Manchurian Railroad at Bedune to Port Arthur and Dalmii. The line to Vladivostok, however, has not been completed. Its length is estimated at 1,273 miles, of which 945 miles are in Chinese territory. Engineering difficulties must be surmounted in the Sungari valley, though not so great as on the longer route selected for the main line through Russian territory from Svyatensk to Pokrovskoye on the Amur. Including the Transcaspian railroads there were nearly 37,000 miles of railroads completed by the end of 1899, the construction during the year having been about 2,700 miles. The prosperity of Russian industry and commerce has been generally attributed to the bringing of the railroads under the control of the state, which has extended the network with a view to the general advancement of the country and wrought great improvements in the way of unifying tariffs and cheapening fares and freights all over the empire. Recent acquisitions have made the extent of the state-owned network more than 22,000 miles out of the 37,000, whereas in 1889, out of 19,000 miles then completed, only 4,250 miles belonged to the Government. In equipment, roadbeds, and speed, as well as in

uniformity of charges and cheapness, there have been great improvements. The new lines in course of construction on Jan. 1, 1900, amounted to about 6,000 miles, while 1,500 miles were authorized but not yet begun. On the Siberian line large sections had to be rebuilt and relaid and new bridges to be put up because the freight traffic was much greater than had been anticipated. In the construction of this line the estimates were not exceeded on any of the sections, and the work was all done within the time calculated. In 1902 the entire line is expected to be completed. In 1897 freight exceeded 490,000 tons, double the amount anticipated. In that and the following year 200,000 arrived in addition to the ordinary passenger traffic of 400,000. A new great Asiatic line is proposed, to start at Andijan, the present terminus of the Transcaspian Railroad, be carried from there to Kashgar, in Chinese Turkestan, thence through Yarkand to Khotan, near the Polu pass leading into Tibet, then eastward to the headwaters of the Cherchen Daria and Lob Nor, whence it would pass through the Altyn mountains and over the Tsaidam plateau to the head waters of the Hoang-Ho, then down the valley of that river to Lanchow and on to Singan-Fu, and from that place to some point on the Pekin-Hankow Railroad, the total route being in the neighborhood of 2,000 miles. The line from Orenburg to Tashkend, on which work was begun in 1900, will connect the Transcaspian Railroad directly with the Russian system. A line of political importance is being constructed from Alexandropol, in the southern Caucasus, to Tabriz, in the Persian province of Azerbaijan, passing by Nakhichevan, near the Persian frontier, where there are extensive deposits of coal, iron, copper, and other minerals.

The state telegraph lines had a total length on Jan. 1, 1898, of 90,383 miles, with 253,648 miles of wire. There were 17,661,056 private telegrams transmitted during 1897. The telephone lines had 25,906 miles of wire in 1897, and 89,509,831 conversations were held, an increase of over eightfold since 1894. At the end of 1898 St. Petersburg and Moscow were placed in telephonic communication.

Finland.—The grand duchy of Finland, ceded to the Emperor of Russia on Sept. 17, 1809, by the treaty of Fredrikshamn, retained by the grant of Alexander I some of its constitutional liberties. Laws for Finland are prepared in the State Secretariat of Finland, consisting of the State Secretary and four members nominated by the Emperor, two of them being proposed by the Senate of Finland. The Senate at Helsingfors is nominated by the Crown, and has charge of the post office, railroads, canals, customhouses, public health, and courts of law, being divided into the Departments of Finance and Justice. The national Parliament of Finland, in which the four estates of the nobles, the clergy, the burghers, and the peasants are represented, can discuss and amend the projects of law, but the Czar, who bears the title of Grand Duke of Finland, may veto its action. No new taxation and no amendment of the Constitution can be enacted without the consent of the four estates in Parliament. Finland has its own money and customs tariff. Of a population of 2,592,864 in 1897, the number dwelling in towns was 291,584; in the rural districts, 2,301,280: the number of males, 1,281,420; of females, 1,311,444. The number of Swedes was 351,300; of Russians, 7,300; of Germans, 1,820; of Laps, 1,100. The Finns numbered 2,231,300. The value of imports in 1898 was 237,000,000 marks, of which 81,900,000 marks came from Russia, 74,900,000 marks from Germany, 38,400,000 marks from Great Britain, 15,600,000 marks from Sweden and Nor-

way, 8,200,000 marks from Denmark, 4,400,000 marks from France, 2,100,000 marks from Spain, and 11,500,000 marks from other countries. The value of exports was 178,000,000 marks, of which 49,000,000 marks were exports to Russia, 53,900,000 marks to Great Britain, 17,000,000 marks to Denmark, 16,100,000 marks to France, 15,000,000 marks to Germany, 7,600,000 marks to Sweden and Norway, 5,300,000 marks to Spain, and 14,100,000 marks to other countries. The export of timber was 91,200,000 marks in value; of butter, 27,000,000 marks; of paper pulp and paper, 17,200,000 marks; of iron, 4,100,000 marks. The imports of cereals amounted to 44,400,000 marks; of machinery, 19,300,000 marks; of iron manufactures, 19,200,000 marks; of cotton and cotton goods, 13,000,000 marks; of woollens, 8,900,000 marks; of coffee, 8,800,000 marks; of sugar, 7,600,000 marks. The number of vessels entered at the ports of Finland during 1898 was 8,566, of 1,918,675 tons, of which 5,878, of 862,697 tons, were Finnish; 606, of 90,575 tons, Russian; and 2,082, of 965,403 tons, foreign. The number of vessels cleared was 8,588, of 1,927,605 tons, of which 5,904, of 874,471 tons, were Finnish; 608, of 89,919 tons, Russian; and 2,076, of 963,215 tons, foreign. The mercantile marine of Finland consisted on Jan. 1, 1899, of 1,896 sailing vessels, of 271,824 tons, and 236 steamers, of 41,043 tons. The length of railroads on Jan. 1, 1898, was 2,553 kilometres, all the property of the Government excepting 80 kilometres; the number of passengers carried in 1897 was 4,263,775; tons of freight, 1,662,260; capital cost, 205,556,651 marks; receipts, 19,523,972 marks; expenses, 12,281,655 marks. The number of letters and postal cards carried in the mails in 1897 was 14,053,794; parcels, 2,685,499; newspapers, 13,380,810; registered letters, 1,005,005; receipts, 2,612,777 marks; expenses, 2,246,076 marks.

The protests of the Finnish estates against the military service law incorporating the Finnish contingent with the Russian army were disregarded, and in an imperial message they were warned that they must confine their attention to local and economical questions. On the reassembling of the Diet at Helsingfors, in February, 1900, the representatives of all the four estates firmly declared that they could not renounce their right to self-government, to equal justice, and to the rule of law. The Russian authorities responded by enforcing the censorship more rigorously against Finnish newspapers. The Finnish estates held that a law, whether fundamental or general, to be valid in the country can be enacted only with the consent of the estates; that neither the institutions of Russia nor its autocratic system have been introduced into Finland, nor have they any force there; that the Russian Council of State can not act as a legislative organ for Finland; that the imperial manifesto and the statutes based upon it are inconsistent with the right of making their own laws, which, according to the Constitution of Finland, belongs to her people; that if a change in the Constitution should in any circumstances become expedient, this can only be brought about, unless the sanctity of the fundamental law

be violated, with the co-operation of the estates. The Finns were aware that the law requiring Finnish soldiers to serve in Russian regiments was the prelude to a process of Russification such as has been carried out in Poland and in the Baltic provinces, and that in defending, as well as they could by passive resistance, their constitutional right to legislative autonomy they were fighting for the preservation of their nationality. An imperial ukase published on June 26, 1900, commanded the gradual introduction and the use of the Russian language in all the official departments and public offices of Finland, beginning with the Chancery of the Secretary of State and the Senate. Five years were given for the minor and provincial officials to prepare for the adoption of Russian exclusively in their communications with their superiors. Private individuals, however, would be allowed to use the native tongue freely in all their business with public departments and authorities. For protesting vigorously against this decree the *Nya Pressen*, Finland's most important newspaper, was suppressed forever. The Finnish Senate refused to promulgate the imperial manifesto on the ground that it was unconstitutional. Although a committee had prepared the decree as early as January, its publication was delayed until after the dissolution of the Diet. When peremptory orders came for the Senate to publish the manifesto, 14 of the Senators resigned and the remaining 7 still held out. The effect of making Russian the official language would be to transfer the higher administration to Russians. The ukase stated that Alexander I, in taking possession of Finland in 1808, declared that Finnish and Swedish were to be used as official languages only until such time as Russian could be introduced. In a protest signed by the members of the Diet it was urged that Finnish and Swedish were not local languages in subordination to an imperial language, but the national languages of Finland, and when the relations of the grand duchy and Russia had been defined at the meeting of the estates at Berga the Emperor Nicholas recognized the right of the Finns to use their own language in the administration; otherwise the promise embodied in a fundamental law that only native-born Finlanders should, with a few exceptions, be Government officials would have no meaning. Public meetings in which the Finns could express their indignation were forbidden, as well as the formation of patriotic associations for the defense of national liberties. Against such denial of the constitutional rights of meeting and association the members of the Diet protested in a petition to the Czar. The Secretary of State, as well as the Governor General, was a Russian not born in Finland. The decision of the Emperor with regard to the petition of the Diet was that it could not be considered because it clashed with the constitution of the Diet and censured administrative measures legally put into force. Governor-General Bobrikoff was informed that he had acted correctly and in accordance with imperial instructions, and the Diet was forewarned that a revision of its constitution in order to define its competency was impending.

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SALVADOR, a republic of Central America. The legislative power is vested in the National Assembly, a single chamber of 42 members, 3 from each department, elected every year by universal suffrage. The President is elected by the direct popular vote for four years. The President

elected for the term beginning March 1, 1899, is Gen. Tomas Regalado. The Vice-President is Dr. Prudencio Alfaro. The Cabinet in 1900 was composed as follows: Minister of Foreign Affairs and Justice, Dr. F. A. Reyes; Minister of the Interior, War, and Marine, Dr. Rubén Rivera; Minister of

Charity and Public Instruction, Dr. J. Triqueros; Minister of Finance, Public Credit, and Public Works, Dr. F. A. Nova.

Area and Population.—The area of Salvador is 7,225 square miles. The population in 1894 was 803,534. The capital, San Salvador, has about 50,000 inhabitants, including most of the natives of pure Spanish descent and the Europeans. Education is gratuitous and compulsory. There are 2 normal, 3 technical, and 13 other higher schools, besides the national university, and 585 elementary schools attended by 29,427 children. In the university are 180 students.

Finances.—The revenue for 1900 was estimated at \$4,992,520, of which \$3,004,420 came from customs and \$1,988,100 from excise duties, stamps, a tax on gunpowder, a road tax, and registration fees. The expenditures estimated for 1900 were \$31,515 for the Legislature, \$32,800 for the presidency, \$751,392 for the Ministry of the Interior, \$380,640 for the Ministry of Fomento, \$338,852 for public instruction, \$256,980 for public charity, \$294,838 for justice, \$366,969 for finance, \$1,639,800 for the public debt, \$76,080 for foreign relations, and \$1,031,860 for the army and navy; total, \$5,201,720.

The foreign debt in 1899 amounted to £726,420 sterling. The Salvador Railway Company, an English corporation, undertook to defray the expenses of the debt and with the aid of a subsidy from the Government to complete before June 30, 1900, the railroad from Sitio del Niño to San Salvador. This company succeeded to the railroads and concessions formerly held by the Central American Public Works Company of London. There is an internal debt of about \$3,000,000. The gold standard was proclaimed by the Government in August, 1897, and the importation of debased silver coin was prohibited. The mint, which was formerly a private enterprise, was transferred to the Government in October, 1899. Gold is at a premium of 15 or 16 per cent.

The Army.—The number of active troops is about 3,000 men, varying greatly at different times. The number in the militia approaches 18,000. In case of war every able-bodied Salvadorian is liable to service up to the age of fifty.

Commerce and Production.—Coffee is the chief product, and after it come sugar, indigo, rubber, balsam, and tobacco. Silver is mined, and some copper, gold, and mercury. The exports of coffee in 1898 were 38,626,479 pounds; of sugar, 1,996,408 kilogrammes. The chief imports are cotton goods, liquors, iron manufactures, flour, silks, and yarn. The United States have the largest share of the import and export trade, but Great Britain is not far behind, and Germany and France have also important shares.

Railroads, Posts, and Telegraphs.—A railroad runs from the port of Acajutla to Santa Anna and Tecla, having a length of 72 miles. Other railroads are building.

The postal traffic in 1897 amounted to 1,600,000 letters. The telegraphs in 1899 had 1,850 miles of wire, and there were 750 miles of telephone wire.

SAMOA, a group of islands in the Pacific, a part of them belonging to Germany and a part to the United States. At a conference held in Berlin in 1889 representatives of Germany, the United States, and England signed an act guaranteeing the neutrality of the islands and their independence under their native kings. International complications and native disturbances following upon the death of King Malietoa in 1898, a joint commission was appointed which recommended the abolition of the kingship and the ter-

mination of the joint protectorate. Germany and England made an agreement on Nov. 14, 1899, by which England renounced in favor of Germany all rights over the islands of Upolu and Savaii, and in favor of the United States all rights over Tutuila and minor islands. In January, 1900, this arrangement was accepted by the United States, which in return for the sole dominion in Tutuila and dependencies resigned to Germany all rights over the other islands.

The German Islands.—Savaii is the largest island of the group, 47 miles long and 28 miles wide. Upolu, of about the same length but narrower, contains the seaport of Apia and the principal cocoanut and cacao plantations. The natives of the islands are Polynesians, Christianized, but still superstitious and warlike. The trade is carried on by a German company, which exchanges trade goods for copra, and by private merchants, most of them citizens of New Zealand or of the United States. The imports in 1897 were valued at £65,926, and exports at £47,839. Clothing, provisions, and kerosene are the chief imports. The number of vessels that visited Apia during 1897 was 77, of 81,736 tons. Dr. Solf, president of the municipal council of Apia, was appointed Governor of German Samoa. For the settlement of claims of Americans, Germans, and British arising out of the acts of the three protecting powers during their joint control of Samoa it was arranged to refer them to a court of arbitration. King Oscar of Sweden and Norway, on Aug. 22, 1900, accepted the post of arbitrator. Governor Solf established a local native magistracy, at the head of which he placed Mataafa, the late claimant for the throne. The Samoans have preserved their native manner of life and the natural vigor and fecundity of the Polynesian race, and still number 35,000, while the Hawaiians have shrunk to less than that number, and in Tahiti and Tonga the race is disappearing, as in Tasmania and other islands it has disappeared. A few German planters have met with moderate success, although it is impossible to train the Samoans to steady labor for hire and imported laborers come too dear. The plantations of cotton, tea, cinchona, sugar, cinnamon, and vanilla that were started in the earlier days of German enterprise have proved unremunerative. Cacao and coffee have been planted more recently, and promise success. Many fruits, such as pineapples, bananas, papaya, oranges, lemons, mangoes, guavas, and alligator pears, now growing wild, would repay cultivation. The staple product is copra, the kernel of the cocoanut, from which oil is extracted in Germany.

Tutuila.—The island of Tutuila, which with many small islands came into American possession in January, 1900, contains the harbor of Pango Pango, which the King of Samoa ceded to the United States for a coaling and naval station in 1872. The line separating the German islands from the American is the meridian 171° east of Greenwich. The islands east of this line belong to the United States. Tutuila has an area of about 54 square miles and 3,800 inhabitants. The area of Manua and other small islands is about 25 square miles. Tutuila, like the German islands, is mountainous and has a fertile volcanic soil. It is covered with the finest woods, and in climate and natural beauty is the most attractive island of the group. The United States occupied and began the improvement of Pango Pango harbor in 1898, before the division of the islands was settled. The harbor is completely landlocked and is the only safe one in Samoa. It is very deep and roomy, and is entered through a passage cut in

the coral reef outside. Commander Tilley was appointed to the governorship of Tutuila as well as to the command of the naval station at Pango Pango. Peace and contentment prevailed on all the islands after the division, and especially on Tutuila, where native chiefs were appointed to rule districts and villages under the guidance and control of the naval governor, but according to native customs. A steel building was constructed for the storage of coal at Pango Pango.

SANTO DOMINGO, a republic in the West Indies, occupying the eastern part of the island of Hayti. The Congress is a single chamber of 24 members, elected by direct qualified suffrage for two years, 2 members for each province and 2 for each maritime district. The President is chosen by an electoral college for four years. Gen. Juan I. Jimenez was elected President, and Horacio Vasquez Vice-President, after the assassination of President Ulisses Heureaux and a subsequent revolution, for a term ending in 1903. Gen. Jimenez appointed as members of his Cabinet the following: Secretary of the Interior and Police, Gen. J. Pichardo; Secretary of Foreign Affairs, Enrico Henriquez; Secretary of Justice and Public Instruction, S. E. Valverde; Secretary of Fomento and Public Works, Gen. T. Cordero; Secretary of Finance and Commerce, J. de J. Alvarez; Secretary of War and Marine, Gen. T. D. Morales.

Area and Population.—The republic has an area of 10,045 square miles and a population estimated at 610,000. The people are a mixed race of Spanish, Carib, and African blood, with a much smaller proportion of pure negroes than in the adjacent republic of Hayti. Santo Domingo, the capital, the most ancient town in North America, has 14,150 inhabitants. Many Cubans have settled in the country in recent years. Elementary education is free and nominally compulsory. About 10,000 children attend school.

Finances.—The revenue in 1898 was \$1,550,294 in gold, mainly derived from duties on imports and exports. The foreign debt was converted in 1897 into a unified loan of £2,736,750 paying 2½ per cent. interest, and a loan of \$7,500,000 paying 4 per cent., both secured by the customs and other assigned revenues, the collection of which was intrusted to the Santo Domingo Improvement Company of New York, which undertook to complete the railroads and harbor improvements for which these sums had been borrowed. The contracts with the company were not carried out, and in April, 1899, the Government defaulted in the payment of interest. The United States gold dollar was adopted as the legal standard on July 1, 1897, and in international transactions and in the customhouse it alone is accepted, though in the country debased silver coins and the depreciated paper currency are all the money that is in circulation. The silver circulating on March 31, 1899, was estimated at \$2,200,000; old bank notes, \$600,000; the new note issue, \$3,600,000. It was attempted without success to raise a foreign loan of \$1,375,000 for the redemption of the paper currency, and subsequently more bank notes were issued. The financial difficulties of the new Government prevented President Jimenez from instituting the reforms that the people hoped for. A new arrangement was made with the Santo Domingo Improvement Company for the liquidation and readjustment of the debts of the Government. The Congress approved the contract in April, 1900. Belgian bondholders objected to it on the ground that it deprived them of the lien on a part of the customs duties that they possessed as security for their bonds. In De-

cember the National Bank failed, which by the authority of Congress had issued all the paper money with which the country was flooded, and for the redemption of which the Government was responsible. A change in the Cabinet followed this new development of the crisis, Señor Hernandez becoming Secretary of the Interior; Señor Cuello, Secretary of War; Señor Brache, Secretary of Finance; Señor Despradel, Secretary of Agriculture; and Señor Joubert, Secretary of Posts and Telegraphs.

The Army and Navy.—The permanent army is employed to garrison Santo Domingo and the provincial capitals—Azua, Macoris, Samana, Puerto Plata, Santiago, Moca, La Vega, and Victoria—a regiment in each place.

The naval force consists of the gunboat *Independencia*, of 350 tons, armed with 5 Hotchkiss and 3 revolver guns; *El Presidente*, of 888 tons, carrying 9 guns; and the *Restauracion*, of 1,200 tons, carrying 9 guns.

Commerce and Production.—The chief products are sugar and coffee. The coffee plantations have increased, and cacao has been planted with success; tobacco, too, by the Cubans, and bananas with American capital. The rearing of cattle is another new industry. Over 85 per cent. of the land is suitable for cultivation, and a considerable area is covered with forests, which are profitably exploited. The high duties retard foreign commerce. The total value of imports in 1898 was \$1,696,280. Exports amounted to \$5,789,997. There were exported 49,300 tons of sugar, 929,980 feet of mahogany, 7,535 tons of tobacco, 2,616,908 pounds of coffee, 7,578,438 pounds of cacao, 2,182 tons of logwood, and 469,000 bunches of bananas, and in addition to these staples hides, honey, beeswax, divi-divi, and rum. The chief trade is with the United States and the islands of the West Indies, but with Germany, England, Spain, and France there is also considerable. During 1898 there were 554 vessels entered at the port of Santo Domingo and 380 cleared. In 1899 the value of imports was \$1,867,702; of exports, \$4,539,185. Iron, copper, and coal exist in Santo Domingo, but are not worked. Salt is mined profitably, and other minerals are found. Gold has always been obtained in dust and nuggets from the beds of streams in the Yague valley and elsewhere.

Railroads, Posts, and Telegraphs.—The railroad from Sanchez, on Samana Bay, to La Vega, 62 miles, is being extended to Santiago, 54 miles having been built. Another line is to be built from Barahona to Cerro de Sal, the salt mountain.

The number of letters, newspapers, etc., dispatched through the post office in 1897 in the internal service was 342,081, and in the international 286,051; in 1898, in the internal service, 396,946, and in the international 238,897.

The telegraph lines constructed by the Antilles Company have a total length of 430 miles, connecting with the French cable.

SERVIA, a kingdom in southeastern Europe. The legislative body is a single chamber called the Skupshtina, composed of 198 members, elected by all male Servians who pay 15 dinars of direct taxes. The reigning King is Alexander I, born Aug. 14, 1876, who succeeded to the throne abdicated by Milan I, his father, on May 6, 1889, and on April 13, 1893, dismissed the regents, and assumed the kingly authority. The ministry constituted on Oct. 23, 1897, and with some changes still in office at the beginning of 1900, was composed at the later date as follows: President of the Council and Minister of Foreign Affairs, Dr. Vla-

dan Georgevich; Minister of Finance, Vukasin Petrovich, succeeding Stevan D. Popovich; Minister of Commerce, Agriculture, and Industry, Z. Zinanovich, succeeding Sima Lozanich; Minister of the Interior, G. A. Guentchich, successor to J. A. Andonovich; Minister of Public Instruction and Worship, Andreas Georgevich; Minister of Justice, G. Stefanovich, succeeding Costa N. Cristich; Minister of Public Works, Gen. J. Atanatskovich; Minister of War, Col. Vutchkovich.

Area and Population.—Servia has an area of 19,050 square miles, with a population computed on Jan. 1, 1900, at 2,452,372, comprising 1,260,892 males and 1,191,480 females. Belgrade, the capital, had 61,147 inhabitants. The number of marriages in 1899 was 24,456; of births, 96,246; of deaths, 59,548; excess of births, 36,968. Education is compulsory in the primary grades and free in all schools, including the university, which has 44 professors and 478 students. In the elementary schools there are 1,505 teachers for 914 schools, with 77,175 pupils; in 14 progymnasias, 130 teachers and 2,454 pupils; in 10 gymnasia, 2 technical schools, 2 girls' high schools, 2 normal schools, and 1 theological seminary, 294 teachers and 4,645 pupils.

Finances.—In the budget for 1900 the total ordinary revenue is calculated at 77,789,048 dinars, or francs, of which 31,842,928 dinars come from direct taxation, 6,700,000 dinars from customs, 3,980,000 dinars from excise taxes, 3,832,000 dinars from law courts, 19,922,100 dinars from monopolies, 2,819,500 dinars from domains, posts, telegraphs, and other state property, 6,300,000 dinars from state railroads, and 2,393,120 dinars from various sources. The expenditures were estimated for 1900 at a total of 76,256,245 dinars, of which 1,200,000 dinars are for the civil list, 360,000 dinars for ex-King Milan's allowance, 95,545 dinars for court officers, 20,245,590 dinars for the service of the public debt, 250,000 dinars for the Skupshchina, 154,633 dinars for the Council of State, 111,000 dinars for general expenses, 2,849,928 dinars for pensions and subventions, 1,692,582 dinars for the Ministry of Justice, 3,113,389 dinars for the Ministry of Worship and Public Instruction, 2,197,671 dinars for the Ministry of Foreign Affairs, 3,788,794 dinars for the Ministry of the Interior, 9,550,364 dinars for the Ministry of Finance, 20,030,986 dinars for the Ministry of War, 7,239,694 dinars for the Ministry of Public Works, 1,826,964 dinars for the Ministry of Agriculture and Commerce, 347,053 dinars for various expenses, and 1,205,052 dinars for control.

The debt on Jan. 1, 1900, consisted of 29,445,000 dinars outstanding of the lottery loan of 1881, 9,795,500 dinars of the loan of 1886, 351,551,993 dinars of the conversion loan of 1895 at 4 per cent., 3,750,000 dinars of the Russian loan, 464,000 dinars borrowed on the salt monopoly, 9,580,000 dinars secured on the tobacco monopoly, 844,500 dinars borrowed for the construction of a local railroad, 8,314,720 dinars advanced by the Bank of Servia, and 10,980,000 dinars borrowed in 1899 at 5 per cent.

The Army.—Servia has a system of compulsory military service, the duration of which is two years from the age of twenty-one, followed by eight years in the reserves, and then ten years each in the first and second ban of the militia. There are 6 guard battalions, 15 regiments of the line stationed in 5 territorial divisions, 5 regiments of field artillery, 1 in each division, 1 regiment of fort artillery, 2 battalions of engineers, a half battalion of pontonniers, and 5 companies of train, the total effectives on a peace footing being 661 officers and 14,000 men in the infantry, 101 officers

and 1,400 men in the cavalry, 270 officers and 4,000 men in the artillery, 65 officers and 1,000 men in the engineers, and 151 officers and 800 men in the train and sanitary corps. The war strength is 22,019 men for each division or 110,245 men in all the divisions, outside of which are 14,863 cavalry, fortress, and special troops, and 35,643 reserve troops attached to the depots, making the total strength of the regular army and its reserve 160,751 men, which can be supplemented by 126,610 men in the first and 66,005 in the second ban of the militia, bringing the fighting strength of the nation up to 353,366 men.

Commerce and Production.—Out of 4,830,260 hectares, the total area of Servia, 1,214,370 hectares are sown to farm crops, 104,066 hectares are orchards, 599,140 hectares meadows, 484,172 hectares forest, and the rest marsh or unproductive. Wheat and corn are the principal crops, besides which the other cereals are grown, and tobacco, hemp, and flax, with grapes for wine and from 7,000,000 to 8,000,000 quintals of prunes, which are dried and exported to many countries. There were 169,928 horses, 922,899 cattle, 3,094,206 sheep, 904,446 pigs, and 525,991 goats in 1896. About 64,000 tons of coal are produced annually, and iron, lead, silver, zinc, quicksilver, antimony, and various minerals are mined to some extent. The total value of imports in 1899 was 46,429,000 dinars, and of exports 65,744,000 dinars. Of horticultural and agricultural products, the value of 1,302,000 dinars was imported and 29,426,000 dinars exported; of food and drinks, 1,217,000 dinars imported and 2,968,000 dinars exported; of colonial produce, 3,419,000 dinars imported; of animals and animal products, 502,000 dinars imported and 27,413,000 dinars exported; of hides, leather, and rubber, 3,297,000 dinars imported and 3,157,000 dinars exported; of wool and woolen goods, 4,528,000 dinars imported and 106,000 dinars exported; of seeds and seed products, 1,918,000 dinars imported and 2,000 dinars exported; of timber and wood manufactures, 2,727,000 dinars imported and 422,000 dinars exported; of metals, 5,027,000 dinars imported and 560,000 dinars exported; of stone, pottery, and glass wares, 2,470,000 dinars imported and 364,000 dinars exported; of paper, 1,008,000 dinars imported; of drugs, chemicals, and colors, 1,669,000 dinars imported and 154,000 dinars exported; of machines and instruments, 1,805,000 dinars imported and 8,000 dinars exported; of cotton and linen goods, 10,273,000 dinars imported and 1,027,000 dinars exported; of silks, 960,000 dinars imported; of hardware, 1,329,000 dinars imported; of clothing and millinery, 2,976,000 dinars imported and 41,000 dinars exported; of fertilizers, 2,000 dinars imported and 96,000 dinars exported. The values of the imports from and exports to the principal foreign countries in 1899 are given in dinars in the following table:

COUNTRIES.	Imports.	Exports.
Austria-Hungary	27,437,000	54,749,000
Bosnia	60,000	116,000
Bulgaria	245,000	1,046,000
Turkey	1,892,000	2,156,000
Greece	667,000	
Roumania	1,068,000	1,812,000
Russia	663,000	8,000
Germany	4,792,000	5,922,000
Italy	878,000	13,000
Switzerland	750,000	124,000
France	690,000	182,000
Belgium	186,000	30,000
Great Britain	5,738,000	
United States	1,078,000	
Other countries	812,000	86,000
Total	46,429,000	65,744,000

Railroads, Posts, and Telegraphs.—The railroads completed up to the end of 1899 had a total length of 554 miles, consisting of the Servian section of the trunk line to Constantinople, 230 miles, and several branches. An extension of one of them from Nisch to join a Roumanian road by a bridge across the Danube was arranged in 1898, and one is authorized to run from Nisch to the Turkish frontier to join a line to be constructed through Albania to the Adriatic. Ten others are projected as feeding lines. The cost of the existing railroads was 98,955,980 dinars.

The post office carried 12,844,000 internal letters and 410,000 internal money letters and postal orders amounting to 117,114,000 francs in 1899, and in the external service 3,933,000 ordinary letters and 191 money letters and postal orders amounting to 60,437,000 francs, besides 1,666,000 ordinary letters and 71,000 letters and orders remitting 31,179,000 francs in transit.

The telegraphs have 2,562 miles of line and 5,041 miles of wire. The number of messages in 1899 was 1,078,420, of which 901,929 were internal, 155,298 international, and 21,193 in transit. The postal and telegraph receipts were 2,242,802 dinars, and the expenses 1,400,425 dinars.

Change of Cabinet.—King Alexander, by announcing his intention to marry a civilian lady, a Servian subject, Mme. Maschin, not only disappointed his father, who resigned his post as commander in chief of the Servian army, and vexed his mother, but caused much dissatisfaction at first in Servia. His ministers resigned, and on July 25 the King appointed a neutral Cabinet, as follows: President of the Council and Minister of Foreign Affairs, Alexa Jovanovich; Minister of the Interior, Lazar Popovich; Minister of Justice, Nastas Antonovich; Minister of Finance, Dr. Mika Popovitch; Minister of War, Lieut.-Col. Milos Vassich; Minister of Public Works, Col. Andreas Jovanovich; Minister of Commerce, Dusan Spasich; Minister of Worship and Public Instruction, Paul Manichovich. The new ministers were judges, departmental chiefs, and army officers who had no party ties. A partial amnesty for political offenses was proclaimed, those who had been sentenced to hard labor having their sentences commuted to simple imprisonment and those who were condemned to imprisonment having their sentences reduced. The defection of most of his prominent and influential supporters, who were identified with the Austrophil policy instituted by King Milan, drove the young King to seek friends rather among the Radicals, to whom his choice of a Queen from among the people was not displeasing, and by drawing nearer to the Radicals, who have always leaned toward Russia, he attracted the good will of the Czar, who hastened to congratulate him on his approaching marriage. Draga Maschin, born Sept. 23, 1867, was the daughter of a Servian magistrate and the widow of a surgeon in the army, and had formerly been a lady in waiting at the court of Queen Natalie. The royal marriage took place on Aug. 4.

SHERMAN, JOHN, an American statesman, born in Lancaster, Ohio, May 10, 1823; died at his residence in Washington, D. C., Oct. 22, 1900. Mr. Sherman came from the noted Connecticut family of that name, the most noted of whose members in colonial days was the stern Puritan Roger Sherman. His father, Charles Sherman, of Norwalk, Conn., married Mary Hoyt, of that place, in 1810, and they immediately emigrated to Ohio, then a frontier State, a large portion of its territory being an unbroken wilderness. He died in 1829, leaving eleven children, of whom William Tecumseh, who became the famous gen-

eral, was the fourth, and John, the subject of this notice, the eighth. The family was left with but scant resources, and soon scattered, John going to live with a relative at Mount Vernon, Ohio, where he attended school three years, when he returned to Lancaster and entered an academy, studying mathematics, in which he became proficient. Becoming impatient of the restraints of school, after two years of academy life he secured a place, though hardly fourteen years of age, as junior rodman in a survey then being made of Muskingum river from Zanesville to Marietta. In this work he remained about two years, when he was turned adrift on account of politics. It was then arranged that he should study law with his brother Charles at Mansfield, but, as he could not be admitted to the bar until he was twenty-one, he read meanwhile much of history, especially that of the United States, travels, and general literature, writing deeds and contracts, later dabbling in politics and looking after cases arising in the office, and earning enough to pay his expenses. His admission to the bar changed the course of his life but little. Mansfield was his home for the rest of his life. His interest in politics grew with his years, and in 1848 he was appointed a delegate to the Whig National Convention that nominated Zachary Taylor for the presidency, and in 1852 he was a delegate to the Baltimore Convention that nominated Gen. Scott as presidential candidate. Two years later he became a candidate for Congress as a Whig, and was elected.

Hardly had he familiarized himself with his new surroundings when he became conspicuous as a staunch opponent of the scheme to extend slavery over the Territories. Before the end of his first term, by direction of the House, a committee of its members, of which Representative Howard, of Michigan, was chairman, investigated the turbulent conditions in the Territory of Kansas, where the importation of slaves from Missouri (consequent on the repeal of the Missouri compromise) was being strenuously opposed by the settlers from the free States. Mr. Howard became ill, and Mr. Sherman, second on the committee, wrote the report thereon, which was widely circulated, and became the substance of the creed of the Republican party then crystallizing into form out of the disintegrating elements of the two old parties, both of which were seeking to avoid the impending storm. The Buchanan administration, which followed, if not friendly to slavery, was opposed to taking any steps to prevent its spread into the new Territories, a policy satisfactory to the slave owners. The debate in Congress on this matter became very angry. Mr. Sherman, to checkmate the moves of the administration, offered an amendment to the army bill then pending, which was adopted, providing that the United States troops should not be used to enforce any of the enactments of the so-called Legislature of Kansas which had been organized in the interest of the proslavery settlers. This measure thwarted for a time the purpose of the administration, but it served to inflame the discussion on the floor of the House, where the tall form of Mr. Sherman became the rallying point for the adherents of the new party, who began to align themselves for the impending struggle which could not be long deferred, and which was destined in the end not only to give freedom to Kansas, but to uproot the institution of slavery in the States where it already existed. On the opening of Congress in December, 1859, Mr. Sherman lacked but three votes of being elected Speaker, and these were withheld because of his

commendation of a book published by Hinton R. Helper, entitled *The Impending Crisis of the South—How to Meet It*, the sentiments of which were declared by many Democrats to be hostile to the peace and tranquillity of the country. Mr. Sherman would not retract his approval of the work, and so the prize fell to other hands, but he was made chairman of the Committee on Ways and Means, the highest place in the gift of the Speaker.

The next session there was an imperative need of more revenue, and a bill for that purpose was introduced by Mr. Morrill, of the committee, who had been largely instrumental in its preparation, but the opponents of the measure succeeded in getting it so loaded down with amendments that Mr. Morrill became disgusted and was willing to abandon it. At the instance of the committee, Mr. Sherman took charge of the bill, and by his superior knowledge of the rules and by masterly tact he forced it through the House in form substantially as originally reported from the committee, much to the chagrin of its opponents. The bill became a law practically unchanged. It was distinctively a bill for protection, and along its lines all subsequent protective tariff measures have been formed.

In 1861 Mr. Sherman entered the Senate, and was accorded second place on the Finance Committee at the solicitation of Senator Fessenden, its chairman, a most unusual recognition, as a new member, if placed at all on an important committee, is generally assigned to the bottom of the list.

The country was now in the throes of civil war, and, pressed for means to carry it on, the House passed a bill providing, among other measures, for the issue by the Government of \$150,000,000 of notes for circulation payable to bearer, but at no fixed time, and made a legal tender for all debts, public and private. When the bill reached the Senate Finance Committee it met with much opposition, Mr. Fessenden being bitterly opposed to the legal-tender feature. At the suggestion of Mr. Sherman the bill was amended by excepting from the legal-tender property of the notes the payment of customs dues and interest on the public debt, and, thus amended, the bill became a law—the most far-reaching measure ever entered upon the pages of our national statutes, touching as it did every business interest and the pocket of every individual in the country. The "legal tenders" are now popular notes, serving well the purpose of circulation; but without the Sherman amendment not a prop would have been left to support the nation's credit.

A year later Mr. Sherman introduced and carried through a measure for the creation of national banks, the notes of which were to be secured by a collateral deposit of public bonds. This measure had been twice recommended by the Secretary of the Treasury in his annual reports, but had not been favorably received. These notes were designed to supplant the State bank issues, which were then in a most unhappy condition. Out of 1,230 State banks issuing notes, 140 were broken, 234 closed, and 131 worthless. At the same time there were in circulation 3,000 kinds of altered and 1,700 varieties of spurious notes, 460 of imitations, and more than 700 of other kinds more or less fraudulent. The substitution of national bank notes, as the measure provided, in place of the obnoxious State bank notes which were then in circulation, marks an epoch in the country's history—a putting off of the old and a putting on of the new in the growth of the nation.

When the civil war was at an end, the problem of restoring the seceded States to their former places in the Union demanded solution. Congress, owing to diversity of views among its members, drifted along aimlessly. Presidents Lincoln and Johnson essayed reconstruction by proclamation, extending their invitations to the white men only. Several States had reorganized thereunder and were awaiting congressional recognition when the ill treatment of the freedmen and the outrages of the Ku-klux Klan, in several sections of the South, aroused the North and united the Republican party. On Feb. 6, 1867, Mr. Stevens, of the House, reported a bill which set forth that the rebel State governments were instituted without the authority of Congress and the sanction of the people; that these pretended governments afforded no protection to life, liberty, or property; that they encouraged lawlessness and crime, and that peace and order ought to be enforced until loyal State governments could be legally established, and therefore the bill made provision for strengthening the administration of the military government existing throughout the seceded States. After considerable debate the bill unchanged passed the House. In the Senate the measure was bitterly denounced as a declaration of war against the seceded States, and several amendments were offered but were voted down. Mr. Sherman, after consulting with a few of his friends, brought forward an amendment, which he offered as section 5 to the bill under consideration, saying in explanation: "In regard to the fifth section, which is the main and material feature of this bill, I think it is right that the Congress of the United States, before its adjournment, should designate some way by which the Southern States may reorganize loyal State governments in harmony with the Constitution and laws of the United States and the sentiments of the people, and find their way back to these halls. My own judgment is that that fifth section will point out a clear, easy, and right way for these States to be restored to their full power in the Government. All that it demands of the people of the Southern States is to extend to all their male citizens, without distinction of race or color, the elective franchise." The discussion that followed was extremely acrimonious, and it was freely predicted that the enactment of the bill into a law would be the death knell of the Republican party. The bill, however, carrying Mr. Sherman's amendment, passed the Senate, and became a law unchanged, over the veto of President Johnson, March 2, 1867. Under the provision of its fifth section, ten States were restored to the Union as anticipated by Mr. Sherman, and suffrage was given to 600,000 freedmen.

While visiting Paris in 1867, Mr. Sherman received at his hotel a request from the Monetary Conference, then in session in that city, for an expression of his views on a proposition so to change the weight of the English sovereign and our gold dollar as to make them multiples in value of the French gold franc. Mr. Sherman immediately replied, approving, and incidentally discussing the theory of a double standard, exposing in strong terms what he believed to be its fallacy. Later he made a report from his committee on the project that had engaged the attention of the conference, in which he renewed his objections to any attempts at operating a double standard, assuming that the gold unit, which had been in use since 1834, would continue indefinitely as the standard of this country. The Senate was favorable to changing the weight of our gold dollar as proposed, but England objected



John Sherman

A year later Mr. Sherman introduced and carried through successfully the creation of national banks, the notes of which were to be secured by a collateral deposit of public lands. The scheme had been twice recommended by the effects of the treasury in financial reverses had not been favorably received. These reverses were so great as to supply the State bank with more than in a most unpropitious time. In 1860 State banks issued notes, valued at \$7,954,434 closed, and 131 worthless. The same year there were in circulation \$900,000 of United States certificates of circulation, none of them having matured; the two of other currencies amounting to \$1,300,000, the substitution of which was made in the measure provided for payment of the United States bank notes which were then no longer in circulation. In the country's first step toward getting off of gold and putting on of the cow in the growth of the nation.

While visiting Paris, he received at his hotel a French Conference, after the expression of his change the weight of the gold dollar as to the value of the French franc immediately replied, after discussing the theory of the gold dollar in strong terms its policy. Later the committee on the subject of the attention of the conference his objections to any doubt still remained, as to which had been in use since its infancy as the standard of value was favorable to our gold dollar as proposed, but English silver



John Sherman

to the slight change in the weight of her gold sovereign, and for this reason nothing came of the scheme.

In view of Mr. Sherman's opposition, as stated in the letter and report mentioned, his action in 1873 in pressing through the Senate the coinage act, by which the gold dollar was permanently made the standard of value and the unit of account in the United States, and no further authority given for the issue of the silver dollar, needs no explanation.

In 1869 Mr. Sherman was made Chairman of the Senate Committee on Finance, in place of Mr. Fessenden, who had resigned from the Senate, which place he held until called to the Treasury in 1877. Meanwhile a great clamor had arisen for payment of the public obligations in legal tenders, the kind of money the Government received for them when they were issued. The law controlling their payment was not explicit on this point, but Mr. Sherman argued that, waiving all technicalities, by making the bonds payable without question in coin their value would be so appreciated that as they matured the Treasury would be able to refund them at par at a lower rate of interest, and the saving therefrom would be greater than any possible gain from forcing their payment in the depreciated notes, and at the same time there would be no opportunity for an imputation of repudiation. To that end he reported a bill, which became a law March 18, 1869, explicitly declaring the bonds payable in coin. Experience justified the policy urged by Mr. Sherman, the bonds being subsequently refunded with much advantage, and the credit of the country greatly strengthened.

In 1873 the country suffered from a financial panic arising from the unsatisfactory condition of the paper currency, and relief in some way was urgently demanded. Mr. Sherman urged that provision should be made for redemption in coin of the legal-tender notes, thus increasing the circulation of the country to the extent of the hoarded gold, which would then doubtless come into use and stimulate business; but the plausible advocates of paying the bonds in depreciated paper demanded stoutly that, instead of such redemption, there should be a further issue of the notes, and they were able to get a measure to that end through Congress. It was promptly vetoed, however, by President Grant, and this gave Mr. Sherman an opportunity to press his scheme of relief. At his instance, a Republican caucus directed him to present to the Senate and put upon its passage a bill authorizing the Secretary of the Treasury to use the surplus revenues of the Government, and to sell bonds for gold as necessary, with a view to the accumulation of a fund to enable him to redeem at the New York sub-treasury all United States notes presented for that purpose on and after Jan. 1, 1879. The bill became a law Jan. 15, 1875. Mr. Sherman being the only man in either house that spoke in its favor. The bill was not popular, and its enactment was received with little approval in any quarter. Even the friends of resumption doubted its sufficiency to bring about that result. When, two years after its passage, Mr. Sherman became Secretary of the Treasury, the premium on gold had not much diminished, and no steps had been taken by the officers of the Treasury toward accumulating the required reserve for resumption. Mr. Sherman lost no time in forecasting his policy. From a syndicate of bankers subscribing under a contract for bonds for refunding, he obtained, in the spring, permission to retain \$15,000,000 of gold for the resumption

reserve, and soon thereafter \$25,000,000 more from the same parties for a like purpose. Adverse conditions prevented for a while further accumulations. There was little faith, even among his party friends, that the needed gold could be obtained. Congress gave no encouragement, and called him before one of its committees. In response to an inquiry from a member of the House as to what he proposed to do about resumption, Mr. Sherman replied that, unless the law should be repealed, he should redeem the notes in coin as directed; that as Secretary of the Treasury he had no other alternative; and, as far as he deemed prudent, he explained where the necessary gold could be found, and how he proposed to obtain it. Four days later he had secured \$50,000,000 of gold by the sale of bonds above the market price, and resumption was assured. On Jan. 1, 1879, the gold premium had disappeared; gold was offered for the notes, but nobody wanted it, just as Mr. Sherman had predicted. With resumption came the promised relief. Capital, assured of its return in money of equal value, sought investment; labor found employment, and throughout the land every hearth rejoiced in the nation's prosperity.

Incidentally, Mr. Sherman, during his term in the Treasury, greatly reduced the annual interest payment on the public debt by funding more than \$800,000,000 of the war bonds at a lower rate of interest; but his crowning work was the resumption of specie payments, the good effects of which still continue, giving the nation honor and credit throughout the world.

Consequent upon Mr. Sherman's successful administration of the Treasury from 1877 to 1881, his friends brought him forward as a Republican candidate for the presidency at the conventions held in 1880 and 1888, and in both instances he received a strong support.

Upon the change in administration, Mr. Sherman in 1881 returned to the Senate, where he was made Chairman of the Committee on Foreign Relations, from which place he resigned in 1897 to become Secretary of State. But, failing in health, after a short time he returned to private life. He published his *Recollections* (2 vols., 1896) covering the period of forty years in which he was a prominent actor in the drama of American history.

In announcing Mr. Sherman's death, President McKinley said: "In the fullness of years and honors John Sherman, lately Secretary of State, has passed away. Few among our citizens have risen to greater or more deserved eminence in the national councils than he. The story of his public life and services is, as it were, the history of the country for half a century. In the Congress of the United States he ranked among the foremost in the House and later in the Senate. He was twice a member of the executive Cabinet, first as Secretary of the Treasury, and afterward as Secretary of State. Whether in debate during the dark hours of our civil war, or as the director of the country's finances during the period of rehabilitation, or as a trusted counselor in framing the nation's laws for over forty years, or as the exponent of its foreign policy, his course was ever marked by devotion to the best interests of his beloved land, and by able and conscientious effort to uphold its dignity and honor. His countrymen will long revere his memory and see in him a type of the patriotism, the uprightness, and the zeal that go to molding and strengthening a nation."

SOUTH AFRICAN REPUBLIC. See TRANSVAAL.

SOUTH CAROLINA, a Southern State, one of the original thirteen, ratified the Constitution May 23, 1788; area, 30,570 square miles. The population, according to each decennial census, was 249,073 in 1790; 345,591 in 1800; 415,115 in 1810; 502,741 in 1820; 581,185 in 1830; 594,398 in 1840; 668,507 in 1850; 703,708 in 1860; 705,606 in 1870; 995,577 in 1880; 1,151,149 in 1890; and 1,340,316 in 1900. Capital, Columbia.

Government.—The following were the State officers in 1900: Governor, Miles B. McSweeney; Lieutenant Governor, R. B. Scarborough; Secretary of State, Marion R. Cooper; Treasurer, W. H. Timmerman; Comptroller, John P. Derham; Attorney-General, G. D. Bellinger; Superintendent of Education, John J. McMahan; Adjutant General, J. W. Floyd; Railroad Commissioners, Messrs. W. D. Evans, Wiborn, and Garris; Phosphate Inspector, S. W. Vance; Dispensary Commissioner, H. H. Crum; Directors of the Dispensary, Leon J. Williams, H. H. Evans, and A. F. H. Dukes; Chief Justice of the Supreme Court, Henry McIver; Associate Justices, Eugene B. Gary, Ira B. Jones, and Y. J. Pope; Clerk, U. R. Brooks. All are Democrats.

The State officers are elected in November of the even-numbered years, for terms of two years. The Legislature meets annually in January. It consists of 41 Senators and 124 Representatives.

Population.—The Federal census gives the following returns by counties: Abbeville, 33,400; Aiken, 39,032; Anderson, 55,728; Bamberg, 17,296; Barnwell, 35,504; Beaufort, 35,495; Berkeley, 30,454; Charleston, 88,006; Cherokee, 21,359; Chester, 28,616; Chesterfield, 20,401; Clarendon, 28,184; Colleton, 33,452; Darlington, 32,388; Dorchester, 16,294; Edgefield, 25,478; Fairfield, 29,425; Florence, 28,474; Georgetown, 22,846; Greenville, 53,490; Greenwood, 28,343; Hampton, 23,738; Horry, 23,364; Kershaw, 24,696; Lancaster, 24,311; Laurens, 37,382; Lexington, 27,284; Marion, 35,181; Marlboro, 27,639; Newberry, 30,182; Oconee, 23,634; Orangeburg, 59,663; Pickens, 19,375; Richland, 45,589; Saluda, 18,966; Spartanburg, 65,050; Sumter, 51,237; Union, 25,501; Williamsburg, 31,685; York, 41,684.

The population of Charleston is 55,807; in 1890 it was 54,955.

Finances.—The report of the Comptroller, submitted in January, gave the following statements: Cash balance in the treasury, available for expenses of the State government in 1900, \$129,574.96; to this amount add uncollected taxes of 1899, \$625,000; insurance license fees, Comptroller General's Office, \$12,000; additional insurance licenses, \$13,000; fees of Secretary of State's office, \$5,000; total, \$784,524.96. The estimated expenses of the State government for 1900 were \$906,518.90, leaving \$121,943.94, which must be paid from the taxes of 1900. From insurance companies \$12,025 was collected in annual license fees, and paid into the State treasury. The sum of \$13,635.14 was realized from additional license fees.

The Legislature appropriated \$283,832.51 for interest on the State debt.

The report of the dispensary for 1899 showed the total net profits to be \$414,181, of which the towns and cities received \$220,492, and the State \$193,689. The school fund received \$100,000 of this sum. The effect of the new law, it is said, will be to give the cities and towns more of the profits, and reduce the share of the school fund to about \$75,000. An act of the Legislature provides that each school district in the State, where the sum realized from the 3-mill tax and the poll tax is not sufficient to give \$75 to each school in the district, shall have the deficiency made up

to it by the Comptroller from the dispensary profits.

The State has 4 classes of claims against the Government, arising from the several wars. The Revolutionary War claims aggregate far the largest sum, amounting, with interest, to \$316,947.75. The United States holds bonds of the State issued in 1856 to complete the Statehouse—\$125,000 principal and \$123,750 interest. They matured in 1881. Suit was brought in the United States Supreme Court in June to recover the amount, but it was afterward found that the act requiring the suit to be instituted had been repealed nineteen days before the suit began, and notice was given that on the opening of the court in October a motion would be made by the Attorney-General to have the case dismissed. The United States holds a claim against the State for \$340,479.89, for the value of ordnance stores belonging to the Government, which were seized by order of Gov. Pickens in December, 1860, after the adoption of the ordinance of secession, recently described in a Charleston paper as "the obsolete cannon, round cannon balls, and muzzle-loading muskets, and paper cartridges of one ball and four buckshot that were stored away in the United States arsenal in Charleston, or picturesquely arranged about the grounds of that famous armory."

The legality of the act of the Legislature appropriating \$175,000 from the sinking fund to complete the Statehouse was questioned, but the Attorney-General decided that the commissioners had no responsibility but to obey the Legislature, and the contract for the work was let in August.

Valuations.—From the returns of assessments in October it appears that the valuation placed upon real property amounts to \$102,137,777, and that upon personal property to \$53,120,863. Railroad property is valued at \$27,771,973. The total, \$183,030,613, shows a considerable increase over the total of 1899, which was \$176,432,288.

Education.—The Superintendent's report has the following general information regarding the schools, together with recommendations for manual training, especially in negro schools:

"The best proof of interest in education is the willingness to bear an extra local burden. The number of extra levies made this year, although not available for publication in this report, is known to be remarkable. Many districts have tried to make this levy and failed by only a few votes. That town is an exception that has not for some years borne an extra tax and maintained an efficient system of graded schools, and this year's record has considerably reduced the number of exceptions. We have 3,000 white teachers and 2,000 negro teachers in this State, many of them poorly fitted for their work. The normal colleges in the State can not in this generation supply even a considerable proportion of teachers to take the places of those now in the schools.

"The statute now secures too great a privilege to the holder of a nominal college diploma. This has encouraged high schools to charter themselves as colleges and secure an advantage over academies that are more efficient and more honest. But from good colleges come graduates that are no credit to them.

"Many districts and some entire counties are behind in their school funds a year or more. The teachers are paid with warrants that are cashed by banks at a discount, in some cases, of 1 per cent. a month. A few county superintendents have lately brought their schools to a cash basis by careful management, setting aside a part of the funds each year so as to accumulate a sinking fund."

The State Board of Education, appointed in April, is constituted as follows: Henry P. Archer, Graves L. Knight, J. L. McCain, H. T. Cook, A. R. Banks, W. A. Brown, and T. M. Rayson. Under the law the Governor is chairman and the State Superintendent secretary. The board has adopted a set of text-books by Southern authors; the United States history is one approved by Confederate veterans.

At Clemson, the Agricultural College, 463 students were in attendance in September. Many applicants were turned away for want of room. The textile department, lately added, has met with approval and success. A new chemistry building and a new electrical laboratory are provided for, but all departments need enlarged room and equipment. Clemson receives the proceeds of the tax on fertilizer tags.

The Citadel Military College graduated 18 students; Erskine College, at Due West, 20; the college for women at Columbia, 6; Furman University, at Greenville, 26.

The increased attendance at the South Carolina College made it necessary to add 4 teachers to the faculty. At the opening in September, 190 students were enrolled. The degree of Bachelor of Arts was conferred upon 20 students in the summer, and that of Bachelor of Laws upon 12. The college will celebrate the centennial of its organization in December, 1901.

The State College for Girls, at Winthrop, had 353 in the regular classes at the beginning of 1900. There were 23 graduates in the four years' course. The college received from State funds \$33,000 for completing the buildings, and \$5,450 for scholarships.

A bequest of \$100,000 was made by the late James Gibbs for an art school in Charleston, provided \$50,000 additional is raised; but its legality is to be contested. The point of the contest which chiefly threatens the bequest is that of the school being open to both races or not opened for either. The State Constitution provides that the races shall be educated separately, and the Federal Constitution declares that there shall be no distinction on account of race. The will provides for only one school.

Convicts.—The report of the directors of the Penitentiary, submitted in January, shows that there was a balance, Jan. 1, 1899, of \$4,804.44. The total receipts during 1899 were \$63,518.23, making a total of \$68,322.67. The total expenditures for 1899 were \$53,436, leaving cash on hand Jan. 1 of \$9,986.67. The profit from the State farms was \$7,580. The superintendent's report shows 784 convicts at the close of 1899. Two hundred and seventy-two were sent in the year, 17 escapes were recaptured, making the total for the year 1,073. The number in confinement now is 801. The general health is good, but the surprising statement is made that 16 out of 41 died of tuberculosis, and 8 with cerebro-spinal meningitis. In the debate in the Senate on the bill, which passed, to establish a reformatory for young criminals, one of the Senators "declared that it was an outrage that such a condition of affairs exists as can now be seen in the Penitentiary. Hundreds of prisoners can not walk without a limp, and it is simply because their feet or limbs have been frozen." In reply to a question, he said that the superintendent had told him that many men had frozen feet. The stalls (cells) in which the convicts are compelled to stay thirteen hours are unfit for his horse to be stabled in. He declared that convicts were given a certain task, and when they did not do that, and even more, they were warned of what they would get—a whipping.

Work on the new prison had progressed so far at the close of the year that it was expected to be ready in January. The reformatory was opened late in the year to receive the 20 boys transferred from the Penitentiary.

Militia.—The organized strength of the militia was given in July as 2,653; the number of men liable for service, but unorganized, as 100,000. The State's share of the Government appropriation for militia will be about \$20,000.

Railroads.—In 1899 123 miles were added to the tracks in the State, and 86 in the six months ending June 30, 1900. The building of short connecting lines between main lines is going on in many parts of the State. The total mileage is 2,830.44. The taxes amounted to \$341,000. The gross earnings of the principal roads of the State, as reported, amounted to \$8,016,384.

Industries and Products.—A report made in March showed that 26 new corporations, most of them asking charters for cotton mills, had filed declarations, and 5 others for increases of capital, making a total of new capital of \$4,890,000. Four cotton-seed-oil mills were closed on account of the high price of seed, \$20 a ton.

The cotton acreage this year was given as 2,075,661, an increase of 112,861 over that of 1899. The cotton blight has made hundreds of acres of the finest sea-island tile-drained lands unfit for the production of cotton. Although this disease has appeared on all the islands and in Christ Church parish, its effect is far more extended on James island. The tobacco crop is 20,000,000 to 25,000,000 pounds annually.

The report of the Phosphate Inspector shows the condition of that industry to be better than it has been for several years.

The number of tons of rock mined in 1898 was 99,315; in 1899 it was 121,073; in 1898, 94,008 tons were shipped, in 1899 134,094. The royalties paid on this to the State amounted to \$34,928.60.

The commercial crop of cotton of the season was given as 921,000 bales; the consumption in mills of the State, 497,496 bales; the number of spindles, 1,704,657.

Exposition.—Preparations are making for the South Carolina Interstate and West Indian Exposition, to be held in Charleston beginning Dec. 1, 1901, and continuing five months.

The Naval Station.—This is to be removed from Port Royal to Charleston. In recommending the removal Admiral Endicott wrote: "To make the Port Royal station accessible for the larger vessels of the navy at all times of the day would involve a very large outlay for dredging, and to complete the deep-water basin immediately in front of the basin, where vessels can be moored and lie afloat at low tide, which is now under construction, would cost probably \$500,000, in addition to the \$200,000 already appropriated. As no commercial city is reached through this harbor, this work would be solely for the naval station, while at Charleston such interests are calling for deeper and deeper navigation to the sea, and such improvements would directly and largely benefit the commercial world through the commercial metropolis of the State."

Lawlessness.—Two riots occurred at polling places at the August primary. At Midway, Bamberg County, 1 man was killed and 2 mortally wounded, and at West Duncan, Greenville County, 1 man was killed and 2 severely injured.

A negro, for an assault and attempt on the life of a white woman, was lynched near Ninety Six, Greenwood County, in February.

Citizens of Neecees, in Orangeburg County, telegraphed to Columbia in March, begging for troops

to protect them from white regulators, who had twice visited the town, beaten people, white and black, and promised to return and kill them. Work on the surrounding farms had been stopped, and people driven from their beds.

A trial at Orangeburg to collect damages from the county for a lynching, under the law that allows such damages to be collected by the legal representatives of the victim, resulted in a verdict for the county, which was set aside, and a new trial was had, with the same result. It is not deemed possible to enforce the law, but it is said that its effect has been to decrease the number of lynchings.

Historical.—Among some rubbish in the office of the Secretary of State was found in January a veneered wooden case about 3 feet long by 2 feet wide, and printed upon the top was "Proceedings of the Convention, 1832-'33. Secretary of State's office." On opening it, he discovered the original ordinance "To nullify certain Acts of the Congress of the United States," as it was engrossed and signed by the members of the convention, the original ordinance as it was drawn up and presented to the convention, Chancellor Harper's original draft of the ordinance, a certified copy of President Jackson's proclamation as printed, and a certified copy of Gov. Robert Y. Hayne's proclamation in reply as printed in the Columbia Telescope, the manuscript journals of the conventions for 1832 and 1833, both beautifully bound, and 2 printed copies of the same journals, and the original ordinance rescinding the first ordinance.

One of the flags carried in the Mexican War by the Palmetto regiment was turned over to the State in April, together with what is left of the regimental records. These and the 2 flags were sent from Columbia to Chester at the time of Sherman's march. The State flag was lost; the army regulation flag is the one just brought back to the Capitol. It passed through 4 battles of the Mexican War, and 5 officers were shot down while carrying it—2 mortally wounded. It went to Cuba in 1898 with the Second Regiment of South Carolina infantry. The "Jackson vase" was also sent by the survivors of the Mexican War to the Capitol.

The Columbia Chapter of the D. A. R. have placed in the State Capitol a marble tablet to the memory of Emily Geiger, a Revolutionary heroine, who in 1781 took a perilous ride of more than 100 miles through forests and across rivers to carry a message from Gen. Greene to Gen. Sumter. She memorized the written message given to her, and, when taken on suspicion before Lord Rawdon, tore up and swallowed the paper secretly, so that nothing was found when she was searched, and she was allowed to go on her way. The result was that Gen. Sumter joined Gen. Greene as he was desired by the message, and Ninety Six, the most important point in upper Carolina held by the British, was evacuated, and Lord Rawdon was compelled to retreat to Orangeburg. It was desired to mark her grave with a monument, but its place could not be found.

Walhalla celebrated its semicentennial this year. A monument to the memory of Gen. John A. Wagener, founder and president of the German Colonization Society, was unveiled.

Legislative Session.—The Legislature met for the annual session Jan. 9, and adjourned Feb. 17. Frank B. Gary was Speaker of the House.

Associate-Justice E. B. Gary was re-elected. The number of acts and resolutions passed was 188. The Governor sent a special message asking

for legislation providing for the draining of the swamp lands of the State, and a resolution was passed for submitting to vote, in November, a constitutional amendment giving the Legislature power to provide for condemnation proceedings and assessment of lands drained. Another constitutional amendment proposed was one providing that the 8-per-cent. limitation as to the proportion of bonded indebtedness a town may assume should not apply to Charleston, Columbia, Rockhill, and Florence, if bonds are issued only to provide water and sewerage, nor to Georgetown, if they are only for water, sewerage, and light. These were voted upon in November and carried; but they take effect only after being ratified by the Legislature of 1901.

A proposed amendment changing from annual to biennial sessions passed the House, and lacked but one vote in the Senate. One extending the term of members of the Legislature to four years was proposed and lost.

Changes were made in the dispensary law. The Board of Control was abolished, and a board of three directors elected by the Legislature is to have charge, with the assistance of a commissioner. They are removable by the Governor. The county boards of control, formerly chosen by the State board, are to be chosen by the delegations in the Legislature from their respective counties. The constables are to give bonds, and their names must be reported to the General Assembly, thus doing away with the secret service. The liquor is to be sold to the county dispensers at 10 per cent. above cost.

The State will hereafter insure its own buildings and county public buildings, except schoolhouses. Half the amount that has been paid for premiums will be paid to the commissioners of the sinking fund for an insurance fund. When the insurance fund reaches \$200,000, no further premiums will be paid except to maintain the fund at this amount. Foreign insurance companies are prohibited from taking insurance through unlicensed agents; policies must be countersigned by resident agents.

A reformatory for male convicts under sixteen was provided for. It is made a misdemeanor for sheriffs to neglect to arrest escaped convicts.

The Secretary of State may, on a majority vote of members, amend the charter of religious, educational, social, fraternal, or other associations not for profit. Regulations were made for the chartering of continuing building and loan associations.

Two bills affecting railroads became laws. One requires separate coaches for white and colored passengers, allows no second-class cars, and provides for a uniform charge of 3 cents a mile. Formerly the roads were required only to provide separate compartments in the coaches.

A law was made permitting homeopathic physicians to have an examining board of their own school, and creating such a board. Registration of births, marriages, and deaths is required by another act.

The military law was amended, and a new pension act was passed designed to restrict the pensions to those really needy. An appropriation of \$10,000 was made for a monument to South Carolina soldiers at Chickamauga, and the erection of a monument to the women of the Confederacy on the Statehouse grounds was authorized.

Several laws were passed, though none of the first importance, changing the common or statute law in the State at large.

Provision was made for completing the Statehouse, the money to be taken from the sinking

fund. The levy for county purposes was reduced to $1\frac{1}{2}$ mill.

Other measures passed were as follow:

Providing that a mortgagee may pay a delinquent tax on all the property of the mortgagor, and add the amount to the mortgage debt.

Making partners liable for their own acts only after notice of dissolution has been given.

Providing for quarterly examinations by joint committees of the Legislature of the accounts of State financial officers.

Providing that fertilizers may be analyzed free of charge at Clemson College.

Authorizing Clemson College to build a railroad to connect the college with stations on other lines.

Giving the board of the South Carolina Military Academy power to confer the title of bachelor of sciences.

Requiring barbed-wire fences within 50 feet of a public highway to have planks along the top.

Providing for the completion of Winthrop College.

Making it a misdemeanor to sell or ship partridge or quail out of the State for five years.

Fixing the weight of a bushel of bolted cornmeal at 46 pounds; of unbolted at 48.

Requiring records and reports of criminal statistics.

Providing for the assessment of railroad property that has been escaping taxation, and for the collection of the taxes past due.

Granting to the United States title to and jurisdiction over certain lands on Sullivan's island.

A proposition to appropriate \$100,000 to the support of public schools came near passing, but was finally rejected by a vote in the Senate of 18 to 17. The institutions for higher education received appropriations: South Carolina College, \$27,000; Winthrop College, \$33,000, and \$5,450 for free scholarships; the State colored college, \$8,000; the Military Academy, \$20,000, and \$6,250 for deficiency and \$1,500 for a library; the Deaf, Dumb, and Blind Asylum, \$30,000.

The total of appropriations, not including the \$175,000 for completing the Statehouse (which amount is to be borrowed from the sinking fund), was \$954,571.76. It includes the appropriations for the interest on the State debt, the \$100,000 for Confederate pensions, the expenses for elections, the pay for the State officers, the support and special appropriations for the State colleges, the pay for the judiciary, the pay for the health departments of the State, and the monument at Chickamauga. The aggregate in 1899 was \$842,151.82.

Political.—State officers were elected in November. The Democratic ticket was the only one in the field. There was the usual speech-making campaign, beginning in June, the candidates for the office of United States Senator and for the nominations for State offices holding joint debates in the various counties before the primary elections, which took place Aug. 28 and Sept. 11. The chief issue was the State dispensary law; James A. Hoyt was the candidate for Governor of those favoring prohibition instead of the dispensary; Gov. McSweeney, F. B. Gary, A. H. Patterson, and the Rev. G. Walter Whitman were the other candidates.

The Republicans held a convention at Columbia, March 20, when four delegates to the national convention were chosen and instructed to vote for the renomination of President McKinley. The resolutions approved his administration, favored American shipping for our commerce, condemned lynching, and said: "We still protest against the suppression of the ballot of the citizens of South

Carolina by the criminal nullification of the Constitution and laws of the United States, enacted under the color of law by the so-called Constitutional Convention of 1895. And we contend that the unjust deprivation of 100,000 citizens of the State of their right of suffrage is a crime against the Government, which we call upon Congress to place the seal of condemnation upon, by enacting such laws as will protect the citizens of the United States in the highest right of citizenship—a voice in the selection of their public officers—and thus preserve in its purity the American doctrine that all governments derive their just powers from the consent of the governed."

A second Republican convention was held Oct. 3, but no State nominations were made.

The Prohibitionists held a conference Jan. 12, and issued an address to the people, in which was said: "Those who manage it say the dispensary paid last year \$130,000 to the education of the children of the State, but they did not tell the startling fact that the dispensary had drawn from the people of the State at least twenty times as much and spent it in fat salaries and other expenses, purchases, etc., of the liquor system. It may be said that in addition to the \$130,000, the counties and towns received a small sum each, and to this we reply: The expenses incurred by the counties and towns in the trial, punishment, and support of criminals, who have been made such by the liquor sold them by the State, will far more than balance the money received from the dispensary. We state it moderately when we say the present system of liquor selling is robbing the people of the State of \$20 for every dollar paid to the State Treasurer for educational purposes. The State Board of Control is sending out of our State each year at least \$1,000,000, and in exchange for it bringing into the State and distributing to our people five times the amount in poverty, wretchedness, disease, and death."

A convention was held May 23, at Columbia, and James A. Hoyt and James L. Tribble were nominated for Governor and Lieutenant Governor, to stand for nomination at the Democratic primaries, as there is a large body of Prohibition Democrats opposed to the dispensary.

The Democratic convention for electing delegates to the national convention met at Columbia, May 16. The resolutions favored the candidacy of Mr. Bryan and approved of Senator Tillman's course in the Senate. They also expressed sympathy with the Boers, and condemned the administration for "not extending an offer of its good offices to terminate the unholy war of subjugation." They denounced the imperialistic policy of the President and the financial policy of Congress, and the "hypocritical attitude of the Republican leaders, who abuse trusts and combines while they use the money obtained from them and stolen from the people to debauch the ignorant voters of the country."

At the first primary, Aug. 28, Gov. McSweeney received 39,097 votes and Mr. Hoyt 33,833. As these were the highest two, their names were voted upon at the second primary, Sept. 11, and the result stood: McSweeney, 51,363; Hoyt, 37,411. The ticket, as settled by the primaries, was: For Governor, M. B. McSweeney; Lieutenant Governor, James H. Tillman; Attorney-General, G. Duncan Bellinger; Secretary of State, Marion R. Cooper; Superintendent of Education, John J. McMahan; Adjutant General, J. W. Floyd; State Treasurer, R. H. Jennings; Comptroller General, J. P. Derham; Railroad Commissioner, J. H. Wharton.

There was no opposition to the candidacy of

B. R. Tillman for United States Senator, though the vote for him was 18,213 less than the total vote for Governor.

At the election in November the above-named ticket was chosen by a vote nearly as large as that for Mr. Bryan, who received 47,236 to 3,579 for President McKinley.

Two constitutional amendments were submitted and both were carried. They are given under Legislative Session in this article. For that on drainage, 21,339 voted yea and 9,917 nay; for that on bonded indebtedness there were 22,530 yeas and 8,108 nays. It was found, however, that an error had been made in the enrollment of the latter, the wrong number having been given to one of the articles to be amended, and the validity of its adoption was questioned.

SOUTH DAKOTA, a Western State, admitted to the Union Nov. 3, 1889; area, 77,650 square miles. The population, according to each decennial census since admission, was 328,808 in 1890 and 401,570 in 1900. Capital, Pierre.

Government.—The following were the State officers in 1900: Governor, Andrew E. Lee; Lieutenant Governor, John T. Kean; Secretary of State, William H. Roddle; Auditor, James D. Reeves; Treasurer, John Schamber; Attorney-General, John L. Pyle; Superintendent of Schools, E. E. Collins; Commissioner of Lands, David Eastman; Adjutant General, H. A. Humphrey; Mine Inspector, James Cusick; Oil Inspector, R. E. J. Meyer; Public Examiner, Maris Taylor; Insurance Commissioner, F. G. King; State Surveyor, William L. Bruce; Veterinarian, J. W. Elliott; Secretary Board of Charities and Corrections, G. W. Kingsbury; Secretary Board of Health, J. H. Jennings; President Board of Regents, H. H. Blair; Chief Justice of the Supreme Court, Dighton Corson; Associate Justices, Dick Haney, Howard G. Fuller; Clerk, Miss Jessie Fuller. Gov. Lee is a Populist; all the other elected officers are Republicans.

State officers are elected in November of the even-numbered years, for terms of two years. The Legislature meets biennially, in January of the odd-numbered years.

Population.—The State has gained 72,762 inhabitants, or 22 per cent., in the past decade. The number of Indians not taxed is 10,932. The census of the counties is incomplete, but that for the 6 Black Hills counties is: Butte, 2,907; Custer, 2,728; Fall River, 3,541; Lawrence, 17,897; Meade, 4,907; Pennington, 5,610.

Finances.—The Governor's message says the financial condition of the State is good. June 30, 1900, the Treasurer had a cash balance of \$555,701.48. The message criticises the policy that compels the State to pay 7 per cent. interest on registered warrants, while it receives no interest whatever on its funds deposited in banks, such interest, if any, being paid to the Treasurer as a personal perquisite and amounting possibly to \$12,000 or \$15,000 annually. There was a reduction of the State debt in 1900 of \$248,000. The net indebtedness, July 1, 1900, was \$540,811.09. The counties owe the State in delinquent taxes \$308,207.54. The defalcation of W. W. Taylor in 1895 is still unsettled, \$146,544.66 having been collected and \$220,842.64 being still due.

Valuations.—The total assessment of the State as compiled this year will be \$331,269,000. Of this amount, acre property is placed at \$101,720,620; town lots at \$181,100,798; merchandise, \$1,373,671; manufactures, \$755,002; horses, \$7,509,575; cattle, \$15,793,163; sheep, \$898,643; hogs, \$830,400; carriages and vehicles, \$1,112,659; moneys and credits, \$1,408,730; household furniture, \$1,054,340; stocks

or shares, \$1,512,282. The railroad companies are assessed at a total valuation of \$12,743,867; telegraph companies, \$187,575; telephone companies, \$174,181; express companies, \$113,500; and sleeping-car companies, \$10,000.

The tax levy of 2 mills for the general fund will furnish \$344,000 if collected in full.

Under a recent ruling of the Attorney-General, mortgages held by resident money lenders are to be assessed and taxed the same as other property.

Education.—The school population in 1899 was 116,278. The apportionment of the permanent school fund in December, 1900, gave 45 cents per capita. On a test case, brought in Mitchell, the court decided that the Board of Education had power to compel obedience to the order of the State Board of Health requiring vaccination.

In the Indian schools there was an enrollment this year of 3,946, and an average attendance of 3,439. A bill was introduced in Congress for building and maintaining an Indian industrial school at or near Everts, in Walworth County.

The State University, at Vermillion, has had an unusually prosperous year. College presidents in conference decided upon two rules affecting athletics. "The striving of one college to attract athletes away from another institution by offers of any kind of compensation, it is believed, will be thoroughly rooted out by the passage of a rule debarring any student who has changed from one college to another from participating in inter-college contests for twelve months after date of such change. The other matter regarding which a rule is to be made is the number of hours of school work required per week. According to this rule, no student who does not pass in twelve hours of work a week will be allowed to enter inter-college contests."

Yankton College had an offer of an endowment of \$50,000 from Dr. Pearsons, of Chicago, on condition that the debt of \$30,000 should be cleared off, and that the institution should hereafter be kept free from debt. Friends of the college subscribed \$34,703, and in March the students celebrated the event with noise and blaze. Subscriptions from other States than South Dakota amounted to \$20,425. By commencement time the entire addition to the college funds had reached \$90,000. The expenses are about \$15,000 yearly.

The State Institution for the Blind was opened at Gary, March 1. During the first term 14 pupils were admitted, 2 of whom were from North Dakota.

Charities and Corrections.—The Insane Hospital, at Yankton, is overcrowded. The last Legislature appropriated \$70,000 for buildings. The laundry and the plant for light and power are completed, but the addition to the main building was still unfinished Nov. 1. The Northern Hospital for the Insane, at Redfield, the building for which was accepted in December, is designed for the feeble-minded. It is the finest public building in the State.

In the past two years there has been a decrease of 11 in the number of prisoners in the Penitentiary. July 1, 1898, there were 145 inmates. July 1, 1899, this had dropped to 130, while on July 1, 1900, the number was 134, showing an increase of 4 over last year but a decrease of 11 over two years ago. The total number of prisoners confined during the period July 1, 1899, to June 30, 1900, was 213. Only two of the convicts were women. The percentage of the life prisoners is greater than ever. In the year about 75 per cent. of the prisoners were employed during the day in the quarries outside the prison, getting out rough stone for new State buildings. The

value of the stone produced at the Penitentiary quarries and used in State buildings during the fiscal year ended June 30 was \$15,147.

Railroads.—In 1900 the railroad mileage in the State was increased by 136.66, divided among 4 lines. The valuation of the roads for assessment was \$12,753,867.

Banks.—Under the law for organizing national banks with capital stock of less than \$50,000, three have been organized in the State. The Yankton Savings Bank, which failed in November, 1899, had liabilities of \$32,000, of which \$8,000 was county funds. The State bank, at Plankinton, failed Jan. 9; Aurora County was said to have had about \$6,000 on deposit. The establishment of the first bank in Selby is described in a dispatch of Aug. 22: "The extension of the Chicago, Milwaukee and St. Paul, from Bowdle, has reached this town and is being pushed west by an increased force. The business buildings of Bangor are about half here, and the remainder will come before the week closes. A hot race occurred when the two banks started—the Farmers' and Merchants' and the Walworth County and State. They left Bangor about the same time. The latter had about a quarter of a mile the start and was much the lighter building, being but one story in height, while the Farmers' and Merchants' is 30 by 20 and two stories. The latter soon began to gain, and when about a mile and a half out passed the State bank and steadily increased the distance between them. The State people sent back for reinforcements, and soon added two more teams, making 12 horses in all. Then they began to gain steadily on the Farmers', who, seeing they would be losers unless help soon arrived, dropped the wagon in which they had the safe and added 4 horses to their 30-horse team. It was then an even thing for some distance, but the Farmers' and Merchants' pulled into town several lengths ahead. Then the race for lots began. The Farmers' were declared winners as the first bank in Selby."

Products.—The values of products of 1899 are given as follow: Wheat, 35,000,000 bushels, \$18,000,000; corn, 40,000,000 bushels, \$9,000,000; gold and other minerals, \$11,131,436; live stock, \$30,000,000; oats, barley, and rye, \$12,000,000; flax and other grains, \$10,000,000; hay and grass, \$10,000,000; dairy and other products, \$6,000,000; wool, hides, and furs, \$3,500,000; sundry items of agriculture, \$10,000,000; total, \$119,631,436. In 1900 the wheat crop was small in the northern part of the State. The estimate for the entire State was about 23,000,000 bushels. But the corn estimate was from 60,000,000 to 80,000,000 bushels.

The value of the gold produced in 1900 was given by the director of the mint at \$6,617,674, while 280,000 fine ounces of silver were produced.

Political.—State officers were chosen at the November election. Nominations were made by the Republicans, the Prohibitionists, the Mid-Road Populists, and by the other wing of the Populists and the Democrats united on one ticket.

The Republicans met at Sioux Falls, May 23. The resolutions commended the administration and reaffirmed the party principles. The ticket follows: For Governor, Charles N. Herreid; Lieutenant Governor, George W. Snow; Secretary of State, O. C. Berg; Treasurer, John Schamber; Auditor, J. D. Reeves; Superintendent of Schools, E. E. Collins; Land Commissioner, David Eastman; Attorney-General, John L. Pyle; Railroad Commissioner, Frank Lecocq.

A Democratic convention, at Chamberlain, June 6, elected delegates to the national convention, instructing them for Bryan; declared allegiance to the Chicago platform, opposition to imperialism

and to trusts, expressed sympathy for the Boers, and commended Senator Pettigrew. "Admiration for the honorable record of C. A. Towne" was expressed, but delegates were not instructed as to the candidates for the vice-presidency.

A second convention of Democrats was held at Yankton, July 11. The People's party was in convention at the same time and place. Conference committees were appointed, and a fusion ticket was arranged. It was: For Governor, Borre H. Lien; Lieutenant Governor, Abraham L. Van Osdel; Secretary of State, Fred B. Smith; Auditor, F. J. Tracy; Treasurer, Charles A. Tedrick; Superintendent of Schools, Miss M. H. Aasved; Commissioner of Lands, Edmund Cook; Attorney-General, A. E. Hitchcock; Railroad Commissioner, W. T. Lafolette. Both platforms denounced the policy of the administration in the Philippines, condemned trusts, commended the administration of Gov. Lee and the course of the Railroad Commission, favored the re-election of Senator Pettigrew, and expressed sympathy for the Boers. The

People's party condemned the policy of the pension commissioner, instructed the electors to vote for Bryan and Towne, and said: "We condemn the outrageous abuse of the military power at Wardner, Idaho, by which civil authority was set aside and peaceable citizens imprisoned for months by armed Federal soldiers without warrant of law, as one of the most dangerous attacks on the liberties of the people in the history of this country. We charge that this attack on the rights of the honest workingmen was made by the War Department, with the full knowledge of, and presumably by the order of the President."

"We condemn the action of the State Board of Equalization for so largely increasing the personal property valuation of the farmers, in some cases more than doubling such valuation, while leaving the valuation of railways and other corporation property, and the credits of banks and other large property holders, without material increase."

The Mid-Road Populists convened at Yankton, Oct. 4, and nominated the following candidates: For Governor, S. E. Stair; Lieutenant Governor, C. J. Maynard; Secretary of State, Fred. Nysturm; Auditor, Frank Stout; Treasurer, Frank W. Bailey; Superintendent of Schools, O. I. Husaboe; Commissioner of Lands, I. I. Stearns; Railroad Commissioner, A. D. Blundin. Mr. Maynard withdrew, and the place of Lieutenant Governor was left vacant. The resolutions approved the Sioux Falls platform and the candidacy of Mr. Bryan, favored the re-election of Senator Pettigrew, and called for a legislative appropriation for the State fair.

The Prohibitionists also named a ticket, as follows: For Governor, F. J. Carlisle; Lieutenant Governor, K. Lewis; Secretary of State, N. J. Davis; Auditor, J. E. Gamble; Treasurer, H. H. Curtis; Superintendent of Instruction, G. H. Grace; Commissioner of Lands, P. S. Rhodes.



CHARLES N. HERREID,
GOVERNOR OF SOUTH DAKOTA.

The returns of the presidential election were: McKinley, 54,530; Bryan, 39,544; Woolley, 1,542; Barker, 339; Debs, 176.

The Republican candidates for State offices and for Congress were elected. The vote for Governor stood: Herreid, 53,803; Lien, 40,091; Carlisle, 1,331; Stair, 316.

Two changes in the Constitution were submitted: One was the repeal of the dispensary amendment, which was adopted in 1898, but had not gone into effect for lack of legislative action to prescribe a method of administering it. The other was to allow the State to loan \$1,000 on a single quarter section of land, the limit having been \$500. For the repeal of the dispensary provision 48,673 votes were cast and 33,972 against. The second amendment was carried by a vote of 49,989 to 5,653.

The Legislature will be constituted as follows: Senate, 39 Republicans, 6 fusionists; house, 78 Republicans, 9 fusionists.

SPAIN, a kingdom in southwestern Europe. The legislative power is vested in the Cortes, consisting of a Senate of 360 members and a Congress of 432 members. Of the Senators half are life and official members and half are elected by the provincial and communal assemblies, the ecclesiastical bodies, universities, and academies, and the most highly assessed taxpayers. Senators in their own right are royal princes, grandees of Spain who have an income of 60,000 pesetas or more, captains general of the army, admirals of the navy, archbishops, and presiding judges of the superior tribunals, numbering altogether 80. The Crown appoints 100 life Senators. The elective Senators sit for ten years, half of them being renewed every five years, but if the Cortes are dissolved all go out. Every Spaniard twenty-five years of age enjoying full civil rights and a citizen of a municipality for two years possesses the right of suffrage. The Congress is composed of 10 Deputies at large receiving over 10,000 votes in several districts, 88 Deputies elected by 26 electoral colleges in which a system of minority representation is carried out, and 334 Deputies elected by districts. The present King of Spain is Alfonso XIII, born May 17, 1886, posthumous son of Alfonso XII and Maria Cristina, an archduchess of Austria, who during her son's minority acts as Queen Regent. The Council of Ministers, constituted on March 4, 1899, was composed in the beginning of 1900 of the following members: President of the Council and Minister of Foreign Affairs, Francisco Silvela; Minister of Justice, Count Torrealanz; Minister of War, Gen. Azcarraga; Minister of Marine, Gomez Imaz; Minister of Finance, Señor Villaverde; Minister of the Interior, Señor Dato; Minister of Public Works, Agriculture, and Commerce, Marquis Pidal.

Area and Population.—The area and population of the 49 provinces at the census of Dec. 31, 1897, is given in the table on this page.

The population consisted of 8,773,730 males and 9,315,770 females. The legal population was 8,884,389 males and 9,341,651 females; total, 18,226,040. The population of Madrid on Dec. 31, 1897, was 512,150; Barcelona, 509,589; Valencia, 204,768; Sevilla, 146,205; Malaga, 125,579; Murcia, 108,408.

Finances.—The revenue for the financial year 1898 was 803,946,904 pesetas, having increased from 754,993,033 pesetas in 1895; the expenditure was 869,402,225 pesetas, having grown from 780,242,373 pesetas. The provisional results for 1899 made the revenue 842,533,002 pesetas and the expenditure 907,189,184 pesetas. Señor Villaverde's budget for 1900 calculated the revenue at

PROVINCES.	Square miles.	Population.
Alava.....	1,205	94,622
Albacete.....	5,972	238,005
Alicante.....	2,098	451,174
Almeria.....	3,302	244,681
Avila.....	2,981	197,686
Badajoz.....	6,687	490,551
Baleares.....	1,860	306,225
Barcelona.....	2,985	1,034,538
Burgos.....	5,650	340,001
Caceres.....	8,013	354,245
Cadiz.....	2,809	434,250
Canarias.....	2,808	334,521
Castellon.....	2,446	304,477
Ciudad-Real.....	7,840	305,002
Cordoba.....	5,190	443,582
Coruña.....	3,079	631,419
Cuenca.....	6,725	241,666
Gerona.....	2,272	298,497
Grapada.....	4,987	477,768
Guadalajara.....	4,870	199,290
Guipuzcoa.....	728	191,222
Huelva.....	4,122	258,970
Huesca.....	5,878	238,935
Jaen.....	5,184	463,906
Leon.....	6,167	384,197
Lerida.....	4,775	274,887
Logroño.....	1,945	186,223
Lugo.....	3,787	459,119
Madrid.....	2,997	737,444
Malaga.....	2,824	485,132
Murcia.....	4,478	518,263
Navarra.....	6,046	302,978
Orense.....	2,739	402,873
Oviedo.....	4,091	612,603
Palencia.....	3,126	193,668
Pontevedra.....	1,739	447,612
Salamanca.....	4,940	317,005
Santander.....	2,118	263,678
Segovia.....	2,714	156,095
Sevilla.....	5,235	547,020
Soria.....	3,836	147,787
Tarragona.....	2,451	324,343
Teruel.....	5,491	239,381
Toledo.....	5,586	370,019
Valencia.....	4,352	775,995
Valladolid.....	3,043	276,366
Vizcaya.....	849	390,223
Zamora.....	4,135	275,354
Zaragoza.....	6,607	413,490
Coast of Africa.....	13	11,008
Total.....	197,570	18,069,500

937,930,415 pesetas, of which 391,342,990 pesetas were to come from direct taxes on land, mines, trade, industry, Government salaries, registration, etc., 359,000,000 pesetas from indirect taxes, customs, and excise, 156,150,024 pesetas from the tobacco monopoly, the lottery, the mint, and other sources, 19,578,254 pesetas from profits on Government property, 2,020,000 pesetas from sales of property, 9,755,000 pesetas from the public treasury, and 84,147 pesetas from Fernando Po. The total expenditures were estimated at 937,178,134 pesetas, of which 9,250,000 pesetas were for the civil list, 1,638,085 pesetas for the Cortes, 427,923,882 pesetas for the public debt, 1,638,178 pesetas for the courts of law, 71,075,889 pesetas for pensions, 812,883 pesetas for the Council of Ministers, 4,754,290 pesetas for the Ministry of Foreign Affairs, 54,453,919 pesetas for the Ministry of Justice, 174,329,539 pesetas for the Ministry of War, 28,341,613 pesetas for the Ministry of Marine, 24,518,862 pesetas for the Ministry of the Interior, 88,038,104 pesetas for the Ministry of Public Works, 19,152,019 pesetas for the Ministry of Finance, 29,951,020 pesetas for collection of taxes, and 699,851 pesetas for Fernando Po. The Cortes refused to sanction the scale of taxation proposed by Señor Villaverde, and demanded economies. Some of the new taxes were therefore stricken out and the salaries and superfluous expenses of all the departments were curtailed. The appropriations for the Ministry of Justice were cut down to 53,466,537 pesetas, those for the Ministry of the Interior to 23,441,097 pesetas, of the Ministry of Public Works to 80,736,422 pesetas, and of the

Ministry of Finance to 18,238,083 pesetas, the cost of tax collection to 29,759,904 pesetas, and even the contribution to Fernando Po to 533,051 pesetas. The army budget was reduced to 165,974,331 pesetas, that of the navy to 25,002,973 pesetas. An act was passed taxing the interest on the public debt 20 per cent., which lowered the expense of the debt to 418,557,138 pesetas, the sinking fund being suspended also. The altered scheme of taxation accepted by the Cortes made the revenue from direct contributions 376,020,790 pesetas; from indirect taxes and customs, 325,640,000 pesetas, from stamps and monopolies, 156,650,024 pesetas. The total revenue according to the revised budget was 885,998,215 pesetas, and the total expenditure 905,451,827 pesetas. The people at large were still extremely dissatisfied with the new taxes, although they fell far short of the sacrifices required to meet the additional burden caused by the wars with the colonies and the United States and by the loss of the colonies. In January, 1900, representatives of all the chambers of commerce and of many of the industrial, agricultural, and labor associations met at Valladolid and formed a National Union under the presidency of Señor Paraiso, which, standing outside of the parties, formulated a programme of reforms that would be imposed on the Government, whichever party was in power. The alternative of not carrying out the demands of the reformers to be faced by the Government was a general refusal to pay taxes on the part of the people, all sections of whom were represented in the National Union. The demands were thoroughgoing and comprehensive. The first was a reduction of at least 100,000,000 pesetas in the expenditure contained in the budget. The reformers called for the complete reorganization of all the public services—of justice, by assuring the independence and responsibility of the judges; of public instruction, by making compulsory schools effective; of the army, by reducing the disproportionate number of officers and improving the conditions of the service; of the navy, by limiting expenses to the maintenance of the few useful ships that were left; of the civil service, by reducing by half the number of officials; of the Cortes, by freeing elections from the influence and control of the authorities and making electoral representation a reality. Commerce and agriculture and the development of the natural wealth and capacities of the country should be the special care of the Government, and for this object the reformers demanded a judicious expenditure of large sums of money in subsidies, and on public works.

The financial result of the wars by which Spain lost Cuba, Porto Rico, and the Philippines was the accumulation of a floating debt of 1,445,000,000 pesetas, offset only by 119,000,000 pesetas paid by the United States in accordance with the treaty and 500,000 pesetas paid later for small islands outside of the accepted boundaries of the Philippine archipelago. In addition to this new debt Spain had to assume several redeemable debts formerly paid by the colonies, amounting to 1,469,000,000 pesetas. The budget had for several years past shown an average deficit of 50,000,000 pesetas, and now Spain had to face an additional burden of more than 300,000,000 pesetas a year, which is equivalent to an increase of 37 per cent. over the normal budget, taking this to be 803,000,000 pesetas. The Cortes in consequence were obliged to impose heavy sacrifices on all classes of the population. In the budget for 1900 as finally adopted the redemption of all amortizable debts was suppressed, and taxes were in-

creased or created affecting consumers of coffee, chicory, sugar, and other articles of common use, importation duties were made much higher, the tobacco tax was increased, the stamp duties and royalties were raised, a high income tax was imposed, duties were levied on successions, and the war tax already paid by merchants and manufacturers was made higher, and many other taxes were introduced. The imposition of an income tax of 20 per cent. on the interest of the public debt could not properly be enforced on the foreign holders of the external bonds because the Spanish Government in 1882 had declared the coupons of the stamped bonds to be exempt from taxation. The bulk of this debt was held by French, German, Belgian, and Dutch investors. A considerable amount was owned by Englishmen, too, and when Spanish commissioners in June, 1900, asked the committee that in connection with the council of foreign bondholders looks after the interests of British investors in foreign loans to agree to the reduction they met with a refusal. Subsequently a compromise was effected with the Continental bondholders, which the English were constrained to accept under the threat that otherwise the deduction of one fifth of their interest ordered by the Cortes would be enforced. Under the arrangement finally agreed to, the tax was 12½ per cent., an eighth instead of a fifth, reducing the interest on 4-per-cent. *rentes* to 3½ per cent. instead of 3¾ per cent., and the Spanish Government promised to restore the interest up to the full rate if ever the tax of 20 per cent. on the interest of the internal debt should be suppressed; and if this were diminished to diminish proportionately the tax on the foreign bonds. It was also agreed that the ½ per cent. deducted from the annual interest handed over to the foreign holders of the external 4-per-cent. stamped bonds should not be applied to the expenses of the Government, but should form a sinking fund with compound interest by which the whole debt is to be extinguished in sixty years. Unless holders of three quarters of the bonds signified their acceptance, and unless the Cortes prior to Jan. 1, 1901, ratified the agreement, the convention would be null and void. On Feb. 9 the Chamber agreed to an increase in the *octroi* duties. The Cortes authorized the conversion of the Cuban 6-per-cent. mortgage bonds of 1886, amounting to 565,750,000 pesetas, the Cuban 5-per-cent. bonds of 1890, amounting to 391,558,000 pesetas, the Philippine 6-per-cent. exterior debt, amounting to 197,950,000 pesetas, and the Spanish 4-per-cent. redeemable bonds, amounting to 1,503,635,000 pesetas, into perpetual 4-per-cent. consols. The conversion was effected at the rate of 113 per cent. for the Spanish internal bonds, 120 per cent. for the Cuban bonds of 1886, par for the Cuban issue of 1890, and 127½ per cent. for the Philippine exterior bonds. The Philippine mortgage bonds were converted at the rate of 82½ per cent. The amortization of the redeemable bonds was suspended indefinitely by laws passed in 1897 and 1898 and the law of Aug. 2, 1899, which imposed a tax of 20 per cent. on their coupons and those of the internal and the unstamped external 4-per-cent. bonds. The conversion added over 3,000,000,000 pesetas to the nominal amount of the Spanish internal perpetual debt, which was 2,543,361,578 pesetas. The conversion of the unstamped external bonds into the same stock was authorized previously. A loan issued in the beginning of June was subscribed many times over, so that when popular subscribers had received each one bond the banking houses received less than 4 per cent. of the amount

they applied for. The consolidation of the debts incurred during the colonial war was proposed in the budget for 1901, in which an increase of the spirit tax and a revision of pensions were provided for. The total revenue for 1901 was calculated at 934,428,380 pesetas, and expenditure at 926,498,150 pesetas, leaving a surplus of 7,930,230 pesetas, to be used for the purchase of quick-firing guns. The increase in the yield of direct taxes was estimated at 16,506,940 pesetas, that of indirect taxation at 21,500,000 pesetas, of monopolies at 7,050,000 pesetas, of state dues at 3,126,226 pesetas, and of miscellaneous receipts at 250,000 pesetas, the total increase of revenue over 1900 being calculated at 48,433,166 pesetas, and that of expenditure at 21,046,329 pesetas.

The amount of the state debts of Spain in 1899 was stated to be 5,820,755,098 pesetas, that of the floating debt of the treasury to be 1,957,326,739 pesetas, and that of the colonial debts to be 1,175,258,000 pesetas, making a total debt of 8,953,339,837 pesetas. The interest on the state debt was 270,854,696 pesetas, on the treasury debt 93,020,566 pesetas, and on the colonial debts assumed by Spain 54,681,877 pesetas; total interest charge, 418,557,139 pesetas. The external debt, included in the above, amounted to £136,700,198, consisting of a loan of £144,500 secured on the quicksilver mines, perpetual *rentes* amounting to £76,887,638, and £59,668,060 of redeemable bonds.

The Army.—The decree of July 18, 1899, fixed the strength of the regular army at 45,770 infantry, 12,447 cavalry, 12,834 artillery, 4,115 engineers, 1,460 administrative troops, 881 sanitary troops, 405 men in the Royal Guard, 554 in the military academy, and 1,534 in special services; total, 80,000 men, not including 18,140 in the gendarmerie. The war strength is 132,000 infantry, 17,156 cavalry, 12,166 artillery, 11,027 engineers, 11,140 administrative troops, and 483 sanitary troops; total, 183,972 men. In peace there are 14,300 horses and mules and 590 guns. The army is organized in 8 regional corps, 3 containing 1 division, 3 containing 2 divisions, and 1 containing 3 divisions of infantry, with a division of cavalry for 3 of the corps and for 1 a brigade. In the Balearic and Canary Islands and Ceuta 3 infantry divisions are maintained, and in Melilla 1 brigade. Spaniards, when drawn for the army at the age of nineteen, may obtain exemption by paying 1,500 pesetas. There are 13 military colleges, and the youths from aristocratic families have enjoyed by custom the privilege of entering the army without regard to the needs of the service. The consequence is that there are officers of every grade who could not find employment even in war, no fewer than 28,000 altogether.

The Navy.—The Spanish war fleet after the losses in the American war was reduced to 1 second-class turret ship of 9,918 tons, 2 coast guards of the second class, 4 first-class, 2 second-class, and 3 third-class protected cruisers, 1 third-class unarmored cruiser, 5 destroyers, 4 torpedo gunboats, and 4 first-class and 7 second-class torpedo boats, and 7 second-class gunboats and small vessels of special types. There were in 1900 under construction 2 second-class cruisers, 1 third-class cruiser, 1 gunboat, and 4 first-class torpedo boats. The belted cruisers *Cataluña*, *Cardenal Cisneros*, and *Princesa de Asturias*, of 7,000 tons, have 12-inch armor on the hull and 8-inch protection for the guns, and with engines of 13,000 horse power can make 20 knots, as can also the deck-protected cruisers *Alfonso XIII* and *Lepanto*, of 4,800 tons. The *personnel* of the navy is 1,002 officers, 725 artificers, 14,000 seamen, and 9,000 marines.

Commerce and Production.—Spain produces grain, meat, dairy products, and other foods abundant for the needs of the population, and wine, olives, fruits, and fish to export in large quantities. Besides the industries connected with these there are important textile and metallurgical industries and a great variety of minor manufactures. The country is very rich in minerals. Coal is found in Oviedo, Leon, Valencia, and Cordoba, and in 1898 the production was 1,900,000 tons. Iron ores are mined in Vizcaya, Santander, Oviedo, Huelva, and Cordoba, some of them of choice quality, sought by the smelters of other countries; the product in 1898 was 7,125,000 tons, and of pig iron 261,799 tons were produced, and 54,500 tons of Bessemer and 58,105 tons of Siemens steel, and of wrought iron and steel 154,900 tons. In former times Spain was pre-eminent in the manufacture of firearms as well as sword blades, but modern weapons are made by newer processes in other countries. The production of zinc in 1898 was 16,270 tons; of copper ore, 1,388,392 tons; of lead ore, 370,000 tons; of calamine, 27,876 tons; of silver and lead ore, 6,346 tons; of quicksilver, 1,785 tons. Sulphate of soda, sulphur, cobalt, salt, phosphorus, and other minerals are found also, the total number of mines in 1898 being 1,814, employing 79,750 persons. The preparation of sardines gives work to 16,500 people, and the product is worth 15,000,000 pesetas a year, while the fishermen who catch sardines, tunny, cod, and other fish number over 67,000. There are 2,614,000 spindles and 68,300 looms used in the cotton industry of Catalonia, which has now lost its monopoly of the Cuban and Philippine markets. In the woolen mills 662,000 spindles and 8,800 looms are employed. Of raw silk 700,000 kilogrammes were produced in 1898. The production of sugar is about 95,000 tons a year. Of corks 30,000 tons are manufactured. The export of chocolate is considerable. There are numerous paper mills, and of their products cigarette papers and playing cards are of some importance in the export trade. Leather is also exported. Among the smaller industries, some of them ancient and some of considerable artistic development, which in the aggregate amount to much in Spain's foreign trade, are the making of matches, castile soap, licorice, cream of tartar, perfumery, ornamental metal work, silver jewelry, carved woodwork, shoes, and guitar strings. Spain also exports onions, sponges, almonds, raisins, and Malaga grapes. There were 800,000 barrels of grapes exported in 1899, and in 1900 the shipments would have been greater if storms had not reduced the crop. The loss of the colonial markets for cottons and other protected manufactures has been made good by an increase in the trade with South America. The market in the former Spanish colonies for the wines and food products of Spain and for articles characteristic of national taste or habit has not been lost. Spain exports a variety of medical drugs, amounting to 6,000,000 pesetas, entirely supplying the world with some kinds. The trade between Spain and the United States has improved as well as the Spanish trade with other countries. Cotton, wheat, bacon, and sugar are imported from the United States, and tobacco in greater quantities since the imposition of a tariff on Cuban and Manila tobacco. The manufacture and sale of tobacco are a monopoly that was granted to the Bank of Spain in 1887 and extended in 1896 for a period of twenty-five years longer. Although the cultivation of tobacco in Spain is forbidden by law, the managers of the *régie* have begun experiments in different dis-

tricts, expecting to obtain an exemption for the monopoly in the event of their proving successful.

The total value of imports for the fiscal year 1899 was 723,444,369 pesetas, and of exports 918,943,206 pesetas. The imports of cotton were 71,914,000 pesetas in value; of coal, 43,216,000 pesetas; of timber, 30,908,000 pesetas; of chemical products, 25,908,000 pesetas; of machinery, 24,348,000 pesetas; of animals, 23,536,000 pesetas; of tobacco, 23,193,000 pesetas; of codfish, 22,703,000 pesetas; of coffee, 17,292,000 pesetas; of wheat, 14,569,000 pesetas; of hides and skins, 13,112,000 pesetas; of cacao, 10,227,000 pesetas; of wool, 9,977,000 pesetas; of vessels, 9,813,000 pesetas; of silks, 8,769,000 pesetas; of linen yarn, 8,353,000 pesetas; of petroleum, 7,528,000 pesetas; of raw silk, 6,814,000 pesetas. The exports of wine amounted to 139,740,000 pesetas; of iron, 78,198,000 pesetas; of copper, 60,946,000 pesetas; of lead, 57,075,000 pesetas; of olive oil, 46,404,000 pesetas; of cotton cloth, 38,317,000 pesetas; of cork, 31,829,000 pesetas; of oranges, 23,772,000 pesetas; of animals, 22,375,000 pesetas; of hides and skins, 20,087,000 pesetas; of dried raisins, 16,904,000 pesetas; of wool, 16,528,000 pesetas; of almonds, 13,037,000 pesetas; of quicksilver 9,404,000 pesetas; of shoes, 8,967,000 pesetas. The imports of alimentary substances, including wine, were 200,050,015 pesetas in value, and the exports 263,542,087 pesetas; imports of metals and manufactures thereof were 27,824,541 pesetas, and exports 102,028,988 pesetas; imports of minerals, glass, and pottery were 75,833,209 pesetas, and exports 157,793,063 pesetas; imports of drugs and chemicals were 75,093,318 pesetas, and exports 22,754,626 pesetas; imports of cotton and its manufactures were 104,418,813 pesetas, and exports 39,835,541 pesetas; imports of other textile fibers and manufactures were 28,742,277 pesetas, and exports 2,334,944 pesetas; imports of wool and hair and their manufactures were 29,745,828 pesetas, and exports 16,864,550 pesetas; imports of silk and silk manufactures were 27,463,525 pesetas, and exports 3,714,474 pesetas; imports of paper and its manufactures were 9,797,183 pesetas, and exports 8,323,565 pesetas; imports of wood and its manufactures were 53,722,551 pesetas, and exports 38,970,797 pesetas; imports of animals and animal products were 82,130,984 pesetas, and exports 50,623,895 pesetas; imports of machinery, vehicles, and vessels were 101,930,039 pesetas, and exports 731,976 pesetas. The imports of gold and silver in 1899 amounted to 73,556,518 pesetas, and the exports to 14,288,290 pesetas.

The imports from and exports to the principal foreign countries in 1899 were in pesetas as follow:

COUNTRIES.	Imports.	Exports.
France	117,700,000	321,700,000
Great Britain	142,100,000	257,500,000
Cuba and Porto Rico	84,200,000	81,400,000
United States	94,400,000	9,900,000
Portugal	58,700,000	48,700,000
Germany	43,900,000	17,900,000
Belgium	29,000,000	29,700,000
Philippine Islands	16,000,000	27,900,000
Italy	15,900,000	21,000,000
Netherlands	6,400,000	21,600,000
Russia	22,900,000	1,800,000
Norway and Sweden	17,400,000	2,900,000
Argentine Republic	5,900,000	12,700,000
British India	17,900,000	.....
Austria-Hungary	5,100,000	7,900,000
Mexico	1,900,000	10,900,000
Switzerland	7,500,000	3,500,000
Egypt	9,100,000	.....
Uruguay	600,000	5,900,000
Spanish colonies	3,100,000	8,500,000
Other countries	101,500,000	33,900,000
Total	723,400,000	918,900,000

Navigation.—The number of vessels entered at Spanish ports during 1899 was 18,726, of 14,630,115 tons, of which 10,381, of 7,439,819 tons, were with cargoes; the number cleared was 17,418, of 15,265,103 tons, of which 15,504, of 13,989,889 tons, were with cargoes. Of the total number entered 9,096, of 6,203,314 tons, and of those cleared 7,762, of 6,717,698 tons, were Spanish.

The merchant navy in 1899 consisted of 1,052 sailing vessels, of 151,946 tons, and 454 steamers, of 566,392 tons.

Railroads, Posts, and Telegraphs.—The length of railroads in operation in 1899 was 8,120 miles, all belonging to companies, most of which have received subsidies or guarantees of interest from the Government.

The post office in 1898 carried 121,565,000 internal, 19,146,000 international, and 296,000 transit letters, 940,000 internal and 303,000 international postal cards, 96,315,000 internal, 25,417,000 international, and 95,000 transit newspapers and circulars, and 197,000 internal and 59,000 international money letters, containing 253,354,000 and 56,886,000 pesetas respectively. The receipts were 24,817,694 pesetas; expenses, 11,411,988 pesetas.

The length of telegraph lines in 1898 was 19,870 miles, with 45,800 miles of wires. The number of internal messages was 4,213,250; of international messages, 1,061,165; of service dispatches, 177,611; total, 5,452,026. The receipts were 8,074,898 pesetas; expenses, 7,613,158 pesetas. The telephone lines had a length in 1898 of 4,960 miles, with 22,650 miles of wire, besides 1,300 miles of long-distance telephones, with 4,295 miles of wire.

Colonies.—In December, 1898, Spain by the treaty of peace signed in Paris relinquished Cuba and ceded to the United States the island of Porto Rico, the Philippine and Sulu Islands, and Guam, the chief of the Ladrões, or Marianne Islands. In February, 1899, the other Ladrone Islands and the Caroline and Pelew Islands were ceded to Germany. There was a question whether the Sibutu and Cagayan Islands, near the coast of Borneo, were included in the original cession to the United States of the Philippines and the Sulu archipelago. The United States Government therefore offered to purchase the sovereign rights of Spain over these islands for \$100,000, and the proposal was accepted by the Spanish Government in July, 1900. The remaining colonial possessions of Spain are territories in Africa having an aggregate area of about 243,877 square miles and an estimated population of 136,000. The island of Fernando Po, with Annabon, Corisco, Elobey, and San Juan, has an area of 850 square miles and 30,000 inhabitants. Ifni, near Cape Nun, is a Spanish settlement with 6,000 inhabitants, covering 27,000 square miles. The territories of Rio de Oro and Adrar, 243,000 square miles in extent, with an estimated population of 100,000, are administered from the Canary Islands. The territories on the Muni and Campo rivers, having an area of 69,000 square miles and 500,000 inhabitants, are claimed both by Spain and by France.

Political Events.—The Silvela Cabinet underwent many changes on account of the difficulties of the financial situation and the various opinions regarding military matters and political and administrative reforms. The portfolio of Foreign Affairs which Señor Silvela had taken himself he gave to the Marquis Pidal, who was succeeded as Minister of Public Works by Señor Cardenas. Admiral Lazaga became Minister of Marine. On April 18 the Cabinet was reconstructed as follows: President of the Council and Minister of Marine,

Francisco Silvela; Minister of Foreign Affairs, Marquis Aguilar de Campo; Minister of Justice, Marquis del Vadillo; Minister of Finance, Señor Villaverde; Minister of the Interior, Señor Dato; Minister of War, Gen. Azcarraga; Minister of Public Instruction, Señor García Alix; Minister of Public Works, Señor Gasset. Other modifications occurred in May. On July 6 Señor Villaverde resigned the Ministry of Finance, and was succeeded by Señor Allen de San Lazar, who carried to completion the negotiations with the foreign bondholders regarding a reduction of interest. The temper of the Spanish people was such that had the foreign owners of Spanish *rentes* not consented to a tax on their bonds the Government would have been driven to exact the full tax that Spanish bondholders had to pay, as the Cortes had decreed, although it was a breach of faith to demand any tax from them. On Oct. 16 Gen. Azcarraga resigned his portfolio and Gen. Linares became Minister of War, having first stipulated that he should be allowed to introduce important military reforms and entirely reorganize the army, and that he should have a free hand in dealing with the army and its reform. One of his first acts was to appoint Gen. Weyler as Captain General of Madrid, and to make other important military changes without consulting the Cabinet. The appointment of Gen. Weyler to a post where he was master of the liberties of every citizen of the capital was so unpopular that a dangerous tension in the public mind was created. The ministers were not pledged, although the Premier was, to let Gen. Linares do anything he liked to do with the army. Señor Silvela found himself confronted with so many resignations that he saw no way out of his difficulties except to place the resignation of the whole Cabinet in the hands of the Queen Regent. Gen. Azcarraga was then invited to form a Cabinet, which was constituted on Oct. 23 as follows: President of the Council, Gen. Azcarraga; Minister of Foreign Affairs, Marquis Aguilar de Campo; Minister of Justice, Marquis del Vadillo; Minister of War, Gen. Linares; Minister of Finance, Allen de San Lazar; Minister of the Interior, Señor Ugarte; Minister of Public Works, Commerce, and Agriculture, Sanchez Toca; Minister of Public Instruction, García Alix; Minister of Marine, Admiral Mozo. When he found that his colleagues would not agree to an increase in naval expenditure Admiral Mozo tendered his resignation, and Marquis Arellano accepted the post, but he resigned directly, and Admiral Ramon Izquierdo became Minister of Marine. Gen. Linares secured the assent of his colleagues to a series of decrees making radical changes in the army organization and effecting many economies by which money can be obtained for improving the armament and instituting maneuvers and firing practice. The ministers decided, however, that all plans for army reform must be laid before the Cortes.

A new extradition convention was arranged between Spain and the United States, and negotiations were carried on during the year for a general treaty of friendship, commerce, and navigation to replace the old treaty, which lapsed by reason of the war. In November a Spanish-American congress assembled in Madrid. All the Spanish republics of Central and South America were represented, and it was decided to hold similar congresses at intervals of about three years. One of the most important decisions of the congress was to establish a tribunal for the arbitration of any differences that may arise between Spain and any of the republics or between the republics themselves; and to facilitate the working of this tri-

bunal it was resolved to seek to bring about the greatest possible uniformity in the commercial, extradition, maritime, trade-mark, and other laws affecting international intercourse. Emigration from Spain is to be directed hereafter exclusively to Spanish-American countries, which will grant special advantages to Spanish settlers. With the help of academies and societies an active, intellectual intercourse will be kept up, and the science, literature, and art of the Spanish-speaking countries will be made as far as possible the common property of all. Special attention will be given to the preservation of the common language in its purity, and it is hoped that the Americans will recognize the Spanish Academy as the highest authority, and will send over every year some of their best scholars to study Spanish. In order that professional diplomas shall have the same value and recognition in all the countries uniform standards of education in all the schools will be promoted. By preferential tariffs, subsidies to steamship lines, reductions of consular dues, the establishment of bonded warehouses, the laying of a Spanish-American cable, the founding of a great commercial exchange bank with headquarters in Madrid and branches in all the capitals of Spanish America, and other similar means, the commerce between the Spanish countries will be encouraged and advanced. A common standard of value and medium of exchange will be sought. The press of the different countries will be brought into closer relations by reducing postage and telegraph rates.

STEEL CARS. About thirteen years ago began in a small way the manufacture of pressed steel parts to take the place of cast iron in freight-car construction. Pressed steel parts are much lighter and cheaper, and effect a large saving in the weight of a car. After continued use had demonstrated the practical utility of the smaller steel parts, other parts—such as center plates, side bearings, cross-ties, and bolsters—were made. Then came the all-steel truck, which saved from 500 to 700 pounds in the weight of a car. The all-steel underframing soon followed.

Starting with the principle that the ideal object should be to transport the heaviest possible loads with the smallest possible dead weights, Charles T. Schoen invented and designed the all-steel car. These cars were first introduced early in 1896. There are many different designs in steel cars and in the details, most of which are covered by patents. Steel cars are built in the following types: Flat cars, gondolas, coke cars, ordinary coal and ore cars, and also what is known as a self-clearing hopper car, which is perhaps the most important type. A very few steel box cars have been built, but they are still regarded as experimental.

Passenger cars are not made of steel, the only distinct advance toward metallic coach work being seen in the sheathing of a considerable number of passenger-car bodies with copper. The construction of steel cars differs from the construction of wooden cars in that steel requires an entirely different treatment in design. There are several different assemblages of material used in building steel cars; for example, standard rolled shapes, special pressed shapes, and a combination of cast-steel parts, rolled shapes, and pressed shapes. There are also built many cars which in a measure may be classed as steel cars. In this class the underframing is steel, of whatever form desired, and the upper part of the car body is of wood. Steel cars are built with a carrying capacity of 30 to 55 tons, and while many of the smaller old style wooden cars carry as little as 20 tons, the maximum carrying capacity of modern wooden

cars runs as high, in a few instances, as that of the steel car, although the average capacity of wooden cars is less.

The advantages of steel cars over wooden cars are many. They are practically indestructible in case of fire. They are stronger, and therefore can withstand shocks in a collision which ordinarily destroys a wooden car. It is generally acknowledged that thirty years is a very conservative estimate for the life of a steel car, while long ex-

repairs of a steel car. The average annual cost of repairing a wooden car is from \$35 to \$40, while the average cost of repairing a steel car per annum is from \$10 to \$15.

Steel cars for export are generally shipped in sections, and on reaching their destinations are assembled under the supervision of a foreman sent out by the builders. The rapid growth of the steel-car industry can readily be seen by the following figures: In 1900 the total number of all-



A STEEL CAR—SELF-CLEARING HOPPER.

perience has shown that the average life of a wooden car is about fifteen years, at the end of which time the car has practically been rebuilt. The scrap of a retired steel car is always marketable. Wood scrap is valueless except as fuel for boilers. The approximate cost of a wooden car of 80,000 pounds capacity is about \$525, while a steel car of the same carrying capacity would cost about \$810. But the difference in the first cost of a steel car is soon made up by the difference in cost of carrying dead weight and in the saving in repairs.

The difference in weight between a number of 80,000 pounds capacity wooden cars and steel cars, recently figured on, showed the wooden car to weigh 18.2 tons and the steel car 16.1 tons. Putting the cost for hauling per ton-mile at 3 mills, shows a saving per ton-mile of 6.3 mills per car-mile in favor of the steel car. The average freight-car mileage on the Pennsylvania Railroad system last year was 10,000 miles per car. Multiplying this by 6.3 mills, would show an annual saving of \$63 per car in favor of the steel car.

As published in advance sheets of the report of the Interstate Commerce Commission for 1900, the total number of freight cars of all kinds in use in the United States on June 30, 1899, was 1,295,510, not including 46,556 cars which were used in private service of the railroads. If these cars were all steel, the estimated saving on the basis of 80,000 pounds carrying capacity would be a sum far in excess of \$60,000,000, but not all cars are of 80,000 pounds capacity. Another great saving, as previously intimated, is in the cost of

steel cars turned out was 14,464, of these 447 being for export. In 1899 the total number of steel cars turned out was 10,500, while in 1898 but 2,700 were built. In addition to this, 4,140 wooden freight cars for domestic use had steel underframes. The accompanying illustration shows a representative type of steel car now in use.

The largest makers of steel cars are the Pressed Steel Car Company of Pittsburg, Pa., their shops having a capacity of 100 cars a day. The Sterlingworth Railroad Supply Company, of Easton, Pa., makes what is known as the rolled-steel car. In this construction the body of the car is made up of steel channels bound by malleable castings at the corners and riveted at intermediate points throughout their length. Other makers of steel cars are the Cambria Steel Company, Johnstown, Pa.; the American Car and Foundry Company, St. Louis; and the National Rolled Steel Car Company, of Pittsburg, Pa. The Goodwin Car Company, of New York, build steel dump cars. These are used for ballast, ore, etc.

SUNDAY REST, INTERNATIONAL CONGRESS ON. An International Congress on Sunday Rest was held at Paris, France, in connection with the Universal Exposition, Oct. 9 to 12, and was attended by men from different countries representing labor and Sunday rest associations, manufacturing and commercial industries, and other clients. M. N. R. Berrenger, Senator of France, presided. Papers were read on different phases of the Sunday question as related to commerce, railroads, manufacturing, and the state. The experiment of the complete closing of the Magasin du

Louvre on Sunday, where goods have for several years been neither bought nor delivered on that day, was the subject of a special paper, and was represented as having been found satisfactory in its working. Differences of opinion were manifested in the discussion of the question of state legislation to promote Sunday rest and for the protection of men employed in industries, the principal ground of opposition to such action being that it would be in effect an interference with personal liberty; but complete agreement existed as to the duty of the state to give the weekly rest to its own men. A resolution was passed affirming the right of the state to protect its citizens in their privilege of rest, but recognizing the principle that each state should judge as to the expediency and extent of the intervention it might exercise. On the presentation of the report of the Woman's National Sabbath Alliance (United States), the congress advised the formation of similar associations of women in Europe. Other meetings were held in Paris about the same time with this one, but not connected with the exposition, on the religious observance of the Lord's Day, among them the meeting of the International Federation for the Observance of the Sabbath.

SWEDEN AND NORWAY, two kingdoms in northern Europe, united in the person of the sovereign. The throne in both descends to the heirs of the house of Bernadotte. Affairs common to both kingdoms are referred to a mixed Council of State. The reigning King is Oscar II, born Jan. 21, 1829. The heir apparent is Prince Gustavus, Duke of Wermland, born June 16, 1858.

Sweden.—The legislative power is vested in the Riksdag, consisting of the First Chamber, having 150 members, elected for nine years by the provincial and municipal bodies, and the Second Chamber, having 230 members, elected for three years, 80 in the towns by direct suffrage and 150 in the rural districts, a part directly and a part indirectly, by natives of Sweden who own or farm land of a certain value or pay taxes on 800 kronor of income. The Minister of State at the beginning of 1900 was E. G. Bostrom, the Minister of Foreign Affairs was C. H. T. A. de Lagersheim, and the Councilors of State and chiefs of the various departments were: Justice, Dr. P. S. L. Annerstedt; War, J. I. de Crusebjörn; Marine, Commander G. Dyrsen; Interior, J. E. von Krusenstjerna; Finance, Count H. H. Wachtmeister; Ecclesiastical Affairs, N. L. A. Claesson; other Councilors of State, S. H. Wikblad and D. G. Resztadus.

Area and Population.—The area of Sweden is 172,876 square miles. The population was computed on Dec. 31, 1899, to be 5,097,402, consisting of 2,486,447 males and 2,610,955 females. The number of marriages in 1898 was 30,900; of births, 140,217; of deaths, 79,642; excess of births, 60,575. The number of arrivals was 7,974 and of departures 13,663; net emigration, 5,689. The population of Stockholm, the capital, was 302,462; of Göteborg, 126,849.

Finances.—The revenue was estimated in the budget for 1901 at 145,681,000 kronor, of which 960,000 kronor are derived from the land tax, 1,500,000 kronor from tonnage dues, 2,200,000 kronor from farmed domains, 700,000 kronor from the personal tax, 8,000,000 kronor from net profits on railroads, 1,610,000 kronor from telegraphs, 5,800,000 kronor from forests, and 1,131,000 kronor from other resources, all of which are classed as ordinary receipts. The extraordinary receipts are 49,000,000 kronor from domains, 11,590,000 kronor from the post office, 5,000,000

kronor from stamped paper, 18,000,000 kronor from the liquor tax, 9,000,000 kronor from the impost on beet sugar, 3,000,000 kronor from the tax on incomes, and 860,000 kronor from various sources. The surplus carried over from former years was 27,340,000 kronor. The total amount of ordinary receipts is 96,440,000 kronor, and of extraordinary receipts 145,681,000 kronor. The total expenditures were estimated at 132,189,700 kronor, of which 89,564,993 kronor are called ordinary and 42,624,707 kronor extraordinary expenditures. Of the ordinary expenditures 1,320,000 kronor are for the royal household, 3,842,950 kronor for justice, 641,950 kronor for foreign relations, 28,220,084 kronor for the army, 8,652,295 kronor for the navy, 18,019,550 kronor for the Interior Department, including 2,792,963 kronor for administration, 10,750,000 kronor for the post office, 1,610,000 kronor for telegraphs, 1,709,724 kronor for hygiene, and 1,156,863 kronor for other expenses, 7,267,675 kronor for the Finance Department, including 2,982,200 kronor for customs, 450,000 kronor for control of excise duties, and 3,835,475 kronor for other expenses, 13,361,074 kronor for the Department of Worship and Instruction, 4,606,965 kronor for the Agricultural Department, of which 2,279,800 kronor are for forests and 2,327,165 kronor for other expenses, and 3,632,450 kronor for pensions. The extraordinary expenditures are 8,442,316 kronor for the army, 13,224,105 kronor for the navy, 7,849,950 kronor for the interior, 975,625 kronor for the Finance Department, 1,710,026 kronor for worship and instruction, 2,904,335 kronor for agriculture, 1,540,000 kronor for pensions, 5,771,000 kronor for railroads, and 207,350 kronor for other purposes. The expenditures of the public debt office are 11,841,300 kronor for interest and amortization, 1,400,000 kronor for the reserve for insuring workmen against illness, and 250,000 kronor for the insurance fund against accidents to workmen, which items added to the ordinary and extraordinary expenditure of the Government make the total estimated disbursements balance the estimated receipts.

The public debt on Jan. 1, 1900, amounted to 317,489,122 kronor, borrowed almost exclusively for the construction of railroads, including 48,799,500 kronor of internal bonds issued in 1887 and bearing interest at 3½ per cent., 98,663,400 kronor outstanding of the foreign loan of 1880, 58,173,778 kronor of the loan of 1886, 32,741,333 kronor of the loan of 1890, 36,000,000 kronor of the loan of 1899, half the authorized issue, all these bearing 3½ per cent. interest, and 25,111,111 kronor of the international loan of 1888 and 18,000,000 kronor, half the authorized issue, of that of 1894, both of them paying 3 per cent. A new loan of £2,000,000 sterling was arranged in June, 1900.

The Army and Navy.—The Swedish army is not yet organized on the system of universal liability, although this was enacted in 1892. The cantoned troops are maintained by rural proprietors, and the enrolled troops are enlisted for two or three years. The effectives in 1900 were 48 officers and 233 men on the general staff, 1,220 officers and 23,792 men in 56 battalions of infantry, 232 officers and 4,615 men in 50 squadrons of cavalry, 257 officers and 2,766 men in the field artillery, 30 officers and 497 men in the fortress artillery, 16 officers and 135 men in the Gotland artillery force, 77 officers and 821 men in 9 companies of engineers, and 66 officers and 522 men in 8 companies of train; total active army, 1,946 officers, 684 employees, 1,728 noncommissioned officers, 1,655 musicians, and 33,057 men, with 6,891 horses. There were 683 officers in reserve,

and the Landwehr was estimated at 250,000, bringing the fighting strength of the nation up to 290,412 men of all ranks, not counting 8 classes of Landstorm, comprising men between thirty-two and forty years of age.

The navy in 1900 consisted of 7 turret ships, 4 old armored monitors, 9 old armored gunboats, 5 torpedo cruisers built since 1897, 3 antiquated corvettes, 9 nearly obsolete first-class gunboats, 1 second-class gunboat, and 13 first-class and 9 second-class torpedo craft. The principal strength of the navy lies in the armored coast-defense turret ships, of which there will be 10. The Svea, of 3,100 tons, launched in 1886, has 11.8 inches of side armor, and carries 2 10-inch guns, 4 4.7-inch quick-firing guns, and 14 smaller ones. The size, the coal endurance, the gun protection, and the speed have been improved gradually in the later ones, while the weight and thickness of the armor have been lessened without lowering its protective value. The Niord and Thor, launched in 1898, have 3,400 tons displacement, armor 9.5 inches thick, a battery of 6 4.7-inch quick firers, besides the 2 10-inch guns in the turret, and a speed of 16.8 knots. The Dristigheten, not yet completed, has 3,500 tons displacement, and the remaining 3 vessels will displace 3,650 tons, with 9.5 inches of armor, engines of 5,500-horse power, giving a speed of 17 knots, and the armament adopted for the Dristigheten, consisting of quick-firing guns exclusively, 2 of 8-inch bore mounted in the revolving turret, and 6 of 6-inch bore. The armored gunboats are being rearmed with 4.7-inch quick-firing guns. The navy is officered by 3 admirals, 6 commodores, 12 captains, 12 commanders, 62 lieutenant commanders, 54 lieutenants, and 26 sublieutenants on the active list, and 150 other officers in the reserve.

Commerce and Industry.—The cereal crops of Sweden in 1898 were worth 272,000,000 kronor. The yield of rye was 7,565,500 hectolitres; of wheat, 1,600,500 hectolitres; of barley, 5,217,100 hectolitres; of oats, 24,814,400 hectolitres; of mixed grain, 3,721,200 hectolitres; of pulse, 733,800 hectolitres; of potatoes, 13,575,100 hectolitres. The live stock at the beginning of 1898 consisted of 516,809 horses, 2,548,192 cattle, 1,296,851 sheep, and 802,859 hogs. Of 2,086,119 tons of iron ore raised in 1897 there were 1,400,801 tons exported. There were 530,893 tons of pig iron produced, of which 72,469 tons were exported, and of bar iron 160,282 tons were exported from 309,715 tons manufactured. There were 10,068 tons of silver-lead ore, 25,207 tons of copper ore, 56,636 tons of zinc ore, and 2,749 tons of manganese ore raised. The production of copper was 288,595 kilogrammes; of lead, 1,470,509 kilogrammes; of silver, 2,218 kilogrammes; of gold, 113 kilogrammes. The coal output was 224,343 tons. The total value of imports in 1898 was 455,249,000 kronor; of exports, 344,909,000 kronor. The imports of coal were valued at 47,064,000 kronor; of rye and wheat, 30,130,000 kronor; of machinery, 28,810,000 kronor; of coffee, 22,329,000 kronor; of iron manufactures, 17,191,000 kronor; of hides and skins, 16,210,000 kronor; of woollens, 16,114,000 kronor; of woolen yarn, 10,242,000 kronor; of cotton, 10,190,000 kronor; of fish, 9,767,000 kronor; of fertilizers, 9,495,000 kronor; of petroleum, 8,815,000 kronor; of vessels, 7,440,000 kronor; of vegetable oils, 7,268,000 kronor; of cotton goods, 7,220,000 kronor; of wool, 6,323,000 kronor; of tobacco, 5,901,000 kronor of pork, 5,530,000 kronor; of wood manufactures, 5,526,000 kronor; of silks, 5,111,000 kronor; of bran, 5,096,000 kronor; of cotton yarn, 5,077,000 kronor; of iron, 4,914,000 kronor; of paper, 4,369,000 kronor; of

wine, 4,306,000 kronor; of oil cake, 4,052,000 kronor. The exportation of lumber was 146,402,000 kronor; of iron, 45,299,000 kronor; of butter, 39,952,000 kronor; of wood pulp, 15,534,000 kronor; of stone, 8,840,000 kronor; of machinery, 8,643,000 kronor; of paper, 7,836,000 kronor; of joinery, 7,742,000 kronor; of fish, 7,596,000 kronor; of matches, 7,179,000 kronor; of iron manufactures, 5,827,000 kronor; of oats, 4,254,000 kronor; of glass, 4,233,000 kronor.

The value in kronor of imports from and exports to the various foreign countries in 1898 is shown in the following table:

COUNTRIES.	Imports.	Exports.
Great Britain	189,144,000	148,649,000
Germany	158,059,000	49,568,000
Denmark	58,614,000	48,446,000
Russia and Finland	27,068,000	17,118,000
France	8,018,000	28,181,000
Netherlands	10,191,000	25,360,000
Belgium	16,188,000	13,462,000
Norway	21,065,000	5,549,000
United States	10,897,000	91,000
Portugal	1,773,000	1,181,000
Spain	1,496,000	1,430,000
Italy	1,417,000	810,000
Australia		876,000
West Indies	50,000	
Other countries	1,638,000	1,126,000
Total	455,249,000	344,909,000

The industrial products of Sweden have increased tenfold in value in thirty years, being estimated at \$275,000,000 in 1897. In wood and iron the country is one of the richest, and water power and electricity make it independent of coal. Local consumption has trebled in thirty years, and in the last few years wages and the cost of living have gone up 30 per cent.

Navigation.—The number of vessels entered at Swedish ports during 1898 was 34,702, of 7,700,000 tons, of which 17,810, of 2,862,000 tons, were Swedish; 2,314, of 841,000 tons, were Norwegian; and 14,578, of 3,997,000 tons, were foreign. The total number cleared was 34,621, of 7,673,000 tons, of which 2,858, of 12,366,000 tons, were Swedish; 838, of 1,558,000 tons, were Norwegian; and 3,977, of 8,201,000 tons, were foreign. Of the total number entered 14,252, of 3,281,000 tons, were with cargoes; of the number cleared 22,125, of 5,383,000 tons, were with cargoes. The number of steamers among the vessels entered was 15,548, of 6,314,000 tons, of which 5,412, of 2,705,000 tons, were with cargoes; the number of steamers cleared was 15,484, of 6,293,000 tons, of which 7,953, of 4,112,000 tons, were with cargoes.

The merchant navy on Jan. 1, 1899, consisted of 2,004 sailing vessels, of 291,392 tons, and 817 steamers, of 265,994 tons.

Railroads, Posts, and Telegraphs.—The railroads on Jan. 1, 1900, had a total length of 6,650 miles, of which 2,290 miles belonged to the Government, and 4,360 miles to companies. The Government lines cost 325,000,000 kronor to construct, the private railroads 312,000,000 kronor. The Government railroads carried 7,728,919 passengers and 4,968,360 tons of freight in 1896, private railroads 12,630,720 passengers and 11,364,837 tons of freight. The total receipts in 1897 were 65,097,537 kronor, and expenses 36,471,958 kronor.

The post office in 1898 carried 64,344,000 internal, 15,871,000 international, and 341,000 transit letters; 7,939,000 internal, 1,376,000 international, and 51,000 transit postal cards; 120,603,000 internal, 7,440,000 international, and 125,000 transit newspapers and circulars, and 3,580,000

internal money letters and postal orders, remitting 816,941,000 francs, and 366,000 international ones, remitting 64,914,000 francs. The receipts were 14,824,085 francs, and expenses 13,345,879 francs.

The telegraph lines belonging to the Government had a length of 5,540 miles in 1898, with 15,980 miles of wire; those belonging to railroad companies had a length of 3,308 miles, with 11,072 miles of wire. The number of paid internal dispatches was 129,681; international, 841,430; in transit, 331,256; service dispatches, 156,899. The receipts were 2,364,326 francs, and expenses 2,010,746 francs.

There were 198 systems of urban telephones in 1898, having 45,540 miles of wire, and the number of conversations was 93,846,774. The long-distance lines had a length of 6,145 miles, with 33,360 miles of wire; number of conversations, 2,785,952.

Legislation.—The improvement of the military power of Sweden on land and sea was the task most urgently impressed upon the Riksdag when it met on Jan. 18, 1900. One of the measures brought forward was for the payment of damages to laborers injured during their work. The Second Chamber declined to sanction the erection of a fortress near Boden at the end of the railroad, but the Government majority in the First Chamber was sufficient to carry the measure on a joint ballot. The Riksdag voted 3,000,000 kronor for small arms and ammunition, and increased the sum allotted to new naval construction to 1,725,000 kronor for 1901. In the beginning of May it was proposed in the First Chamber to impeach the ministers because a Norwegian, M. von Ditten, had been appointed to the chief post in the Ministry of Foreign Affairs, which was in violation of the Constitution. The Premier urged that the constitutional usage would have to be developed in conformity with the act of union, and that the conditions of the union involved the inclusion of a Norwegian in the Ministry of Foreign Affairs. Both Chambers sustained him in his position. On Sept. 12 M. Boström asked to be relieved of his post for considerations of health, and the King appointed Admiral Fredrik Wilhelm von Otter to the premiership. On Oct. 17 the Council of State decided to intrust the Crown Prince with the Government of the country during the illness of King Oscar, who was unable to attend to public business. In November the Minister of War brought in a bill for the thorough reformation of the military system, the task for which he was appointed to succeed Baron von Rappe in 1899. The reform of 1892 was only a transitional measure, which retained the *indelta*, or cantoned troops, furnished and maintained by landed proprietors in lieu of paying taxes, also the enlisted part of the army, and of the conscripted troops, about 29,000 in each year, it required only ninety days of service. In place of this system universal obligatory military duty will become a reality. All who are liable and fit for service will have to serve three hundred and sixty-five days: in the infantry, two hundred and forty-five days consecutively, and then thirty-five days in each year for three years; in the cavalry, artillery, and a part of the engineers, two hundred and eighty-one days in the beginning, and forty-two days in the second and the fourth year. The army will attain not merely greater unity, but at the same time greater numerical strength. It will consist of 6 similarly composed divisions or corps, and will contain 28 regiments of infantry, with the proper complement of troops of other arms. Both infantry and

cavalry will gain greatly in efficiency, while the fortress artillery will be brought up to such a state that they can perform the duties required in the fortresses even in time of peace. The project includes provisions, moreover, for a considerable reserve. The annual cost is reckoned at 57,000,000 kronor, of which 48,338,000 kronor are for the army alone. The accomplishment of the reform will take twelve years.

Norway.—The legislative power is vested in the Storting, containing 114 members, elected for three years, 38 by the towns and 76 by the rural districts. The Storting elects one fourth of its members to form the Lagthing, which has a veto power over the acts of the Odelsting, composed of the rest of the members. The Minister of State presiding over the Council of State at the beginning of 1900 was J. W. C. Steen, and the Councilors of State in charge of the various departments were: Worship and Public Instruction, V. A. Wexelsen; Justice and Police, E. Löchen; Interior, O. A. Qvam; Public Works, H. H. T. Ny-som; Finance and Customs, E. Sundé; National Defense, Major-Gen. P. T. Holst; Secretary of State, H. Lehman; section of the Council sitting at Stockholm, Minister-of-State O. A. Blehr and Councilors-of-State G. A. Thilesen and J. G. Lövland; General Secretary, H. Schlytter.

Area and Population.—Norway has an estimated area of 124,525 square miles. The population on Dec. 31, 1897, was estimated at 2,122,400. The population of Christiania in 1900 was computed to be 226,423, having grown from 148,213 in 1891. The number of marriages in 1898 was 15,039; of births, 64,821; of deaths, 32,693; excess of births, 32,128. The number of emigrants in 1898 was 4,859; in 1899 the number was 6,699. The population of Norway has grown at a slower rate than that of any other European country except France. This is due to the large emigration, especially to the United States. To this fact, since a great part of the emigration consists of young men, is due in considerable measure the excess of women over men. Another cause is the constant mortality from drowning among the men, so many of whom are sailors or fishermen. The number of Norwegian settlers in the United States was over 320,000 in 1890, and since then Norwegians have been emigrating at the rate of about 6,000 a year to the United States, and considerable numbers to South Australia, Victoria, and New Zealand, not a few to Hawaii and the Argentine Republic.

Finances.—The revenue for the financial year 1899 amounted to 83,800,000 kronor from ordinary sources, and the extraordinary receipts were 320,000 kronor subscribed locally for railroad construction and 11,564,300 kronor from loans, making the total receipts 95,685,200 kronor. Of the ordinary revenue 5,244,500 kronor came from direct taxes; 37,421,500 kronor from customs; 4,073,900 kronor from the liquor tax; 4,100,800 kronor from the malt tax; 1,562,900 kronor from the tax on playing cards; 1,143,500 kronor from courts of justice; 661,100 kronor from the succession duty; 1,459,400 kronor from state property. 961,500 kronor of it from forests and 497,900 kronor from mines; 2,826,300 kronor from revenue of active capital; 4,620,000 kronor from the post office; 2,066,200 kronor from the telegraphs; 11,981,100 kronor from railroads; 2,225,400 kronor from the university, schools, and worship; 394,800 kronor from prisons; 1,060,400 kronor from hospitals and insane asylums; and 2,957,600 kronor from various other sources. The total expenditure for 1899 was 73,919,400 kronor for ordinary expenses of the Government and 15,004,900

kroner for extraordinary outlay purposes, the latter including 5,158,900 kroner for the construction of railroads, 4,528,600 kroner for the army, 3,248,000 kroner for the navy, and 2,069,400 kroner for other purposes; total disbursements, 88,924,300 kroner. Of the ordinary expenditures 488,400 kroner were for the civil list; 814,900 kroner for the Storting; 1,394,700 kroner for the Council of State and the Ministries; 8,608,800 kroner for worship and public instruction, of which 7,718,600 kroner were expended on the university, schools, and worship, and 890,200 kroner for other purposes; 6,789,400 kroner for justice, police, and sanitary service, of which 913,600 kroner went for the police and prisons, 2,894,200 kroner for the public health, and 2,981,600 kroner for other expenses; 3,498,900 kroner for the Interior Department, including 260,600 kroner for administration, 1,513,000 kroner for agriculture and stock breeding, 310,200 kroner for fisheries, 55,600 kroner for industry and commerce, 432,500 kroner for forests, and 927,000 kroner for other purposes; 23,957,000 kroner for public works, of which 4,361,600 kroner were for the post office, 3,139,900 kroner for telegraphs, 1,163,200 kroner for subventions for communications, 11,981,100 kroner for the operation of railroads, 2,515,600 kroner for roads, bridges, and canals, 791,200 kroner for ports, and 4,400 kroner for other purposes; 11,859,300 kroner for finance, including 1,842,000 kroner for customhouses, 606,400 kroner for silver mines, 2,502,100 kroner for amortization, 5,032,400 kroner for interest, 749,900 kroner for pensions, and 1,126,500 kroner for other expenses; 10,335,500 kroner for the army, of which 10,050,700 kroner were for the maintenance of the army and 284,800 kroner for triangulation; 5,357,100 kroner for the marine, of which 4,252,500 kroner went for the navy and 1,104,600 kroner for lighthouses and ports; 665,300 kroner for foreign affairs; and 150,100 kroner for accidental expenses.

The public debt on June 30, 1899, amounted to 198,549,100 kroner, comprising 245,500 kroner of old obligations, 29,941,000 kroner borrowed in 1886 at $\frac{3}{4}$ per cent., 61,935,100 kroner of the 3-per-cent. loan of 1888, 9,570,700 kroner borrowed at 4 per cent. in 1892, 88,661,000 kroner raised in 1894 at $\frac{3}{4}$ per cent., 800,000 kroner of 5-per-cent. bonds issued for the construction of a railroad from Drammen to Randsfjord, 11,313,400 kroner of the 3 $\frac{1}{2}$ -per-cent. loan of 1895, 25,242,400 kroner borrowed in 1896 at 3 per cent., and 20,880,000 kroner borrowed in 1898 at $\frac{3}{4}$ per cent. The Government possesses 46,690,600 kroner of active capital funds, 18,633,900 kroner of cash and arrears to collect, and railroads valued at 111,143,500 kroner; total assets, 166,468,000 kroner.

The Army and Navy.—Military service is obligatory according to the law of June 16, 1885, nominally for six years in the active army, but it is confined to a course of instruction in the first year lasting forty-eight days for infantry, sixty days for engineers, eighty days for field artillery, and ninety days for cavalry, followed by twenty-four days of exercise with the Landwehr, and the same amount of practice annually for two or three years. The strength of the active army is about 900 officers and 30,000 noncommissioned officers and men, and these can be supplemented by 800 or more officers and 50,000 men from the Landwehr and Landsturm.

The fleet in 1900 comprised 4 armor clads built since 1897, 4 old monitors, 3 first-class and 8 second-class gunboats, 1 torpedo dispatch boat, and 8 first-class and 17 second-class torpedo craft. The coast-defense turret ships, all built in England, are powerful for their size. The Harold

Haarfager and Tordenskjold, of 3,500 tons each, have a curved armored deck as well as a 7-inch belt and Harveyized armor on the barbettes, and carry quick-firing guns only, 2 of 8.2-inch bore, 6 of 4.7-inch, 6 3-inch, and 6 smaller ones; their speed is 17.2 knots. The Norge and Eidsvold, displacing 4,000 tons, have their smaller guns in casemates of 6-inch armor. By the law of 1892 all Norwegian sailors are required to go through seventy days of training for the naval service. There are 116 officers in active service, 60 in the reserve, and about 700 petty officers and enlisted seamen.

Navigation.—The number of vessels entered at the ports of Norway during 1899 was 14,456, of 3,140,169 tons, of which 6,573, of 1,961,290 tons, were with cargoes, and 7,883, of 1,178,879 tons, were in ballast; the total number cleared was 14,445, of 3,157,227 tons, of which 13,216, of 2,636,120 tons, were with cargoes, and 1,229, of 521,107 tons, in ballast. Of the total number entered 7,191, of 2,085,730 tons, were Norwegian and 7,265, of 1,054,439 tons, foreign; of the total number cleared 7,235, of 2,111,528 tons, were Norwegian, and 7,210, of 1,045,699 tons, foreign.

The merchant navy on Jan. 1, 1899, comprised 5,981 sailing vessels, of 1,120,808 tons, and 1,068 steamers, of 437,570 tons; on Jan. 1, 1900, 5,698 sailing vessels, of 1,052,687 tons, and 1,128 steamers, of 482,247 tons.

Commerce and Production.—The exports of rough lumber in 1898 were valued at 40,133,300 kroner, and of worked lumber at 18,493,800 kroner. Breadstuffs were imported to the amount of 45,061,000 kroner, butter for 737,400 kroner, and 7,505,500 kroner worth of meat and bacon. The mine products in 1897 were valued at 3,480,000 kroner, and furnace products at 1,432,000 kroner. The catch of cod in 1897 was valued at 12,429,507 kroner; of herring, 7,954,025 kroner; of mackerel, 247,198 kroner; of salmon and sea trout, 1,090,490 kroner; other fish, 3,026,879 kroner; lobsters, 450,744 kroner.

The total value of imports in 1899 was 310,485,000 kroner, and of exports 159,387,000 kroner. Imports of cereals were 51,700,000 kroner, and exports 600,000 kroner; imports of fermented liquors 7,400,000 kroner, and exports 400,000 kroner; imports of colonial produce 21,300,000 kroner, and exports 400,000 kroner; imports of animals and animal food products 16,000,000 kroner, and exports 54,300,000 kroner; imports of coal 24,000,000 kroner, and exports 100,000 kroner; imports of metals 13,800,000 kroner, and exports 2,300,000 kroner; imports of hides and leather 10,100,000 kroner, and exports 6,300,000 kroner; imports of textile materials 6,200,000 kroner and exports 300,000 kroner; imports of timber 6,400,000 kroner, and exports 39,600,000 kroner; imports of minerals 7,200,000 kroner, and exports 4,600,000 kroner; imports of metal manufactures 28,300,000 kroner, and exports 2,100,000 kroner; imports of cloth 36,300,000 kroner, and exports 700,000 kroner; imports of paper and paper manufactures 2,700,000 kroner, and exports 9,100,000 kroner; imports of leather goods 1,700,000 kroner, and exports 200,000 kroner; imports of wood manufactures 3,400,000 kroner, and exports 21,900,000 kroner; imports of drugs and colors 2,100,000 kroner, and exports 200,000 kroner; imports of oils 16,100,000 kroner, and exports 6,200,000 kroner; imports of miscellaneous merchandise 50,200,000 kroner, and exports 16,400,000 kroner. The total imports of alimentary substances were 102,000,000 kroner, and exports 55,800,000 kroner; total imports of raw materials 67,700,000 kroner, and exports 58,200,000 kroner; total imports of

manufactured products 72,400,000 kroner, and exports 34,000,000 kroner; total imports of miscellaneous products 68,400,000 kroner, and exports 16,400,000 kroner.

The values in kroner of the imports from and of the exports to the principal foreign countries in 1899 are given below:

COUNTRIES.	Imports.	Exports.
Great Britain	88,538,000	66,494,000
Germany	88,060,000	22,475,000
Sweden	25,567,000	15,798,000
Russia and Finland.....	25,318,000	5,015,000
Denmark	16,561,000	6,486,000
Netherlands	13,978,000	9,271,000
Belgium	15,782,000	7,133,000
United States.....	19,299,000	907,000
Spain	8,082,000	11,108,000
France.....	4,218,000	6,862,000
Italy.....	1,525,000	2,251,800
Portugal.....	1,088,000	543,000
Other countries.....	7,449,000	5,049,000
Total	310,485,000	159,387,000

The majority of the inhabitants of Norway are engaged in agriculture, notwithstanding the fact that the arable soil is found only in isolated narrow valleys. Of the total area of the country 64 per cent. consists of bogs, bare mountains, lakes, and tracts covered with snow and ice. Only 3 per cent. is used as grain fields and meadow land, less than 1 per cent. being devoted to grain crops. Out of 120,000 farmers 109,000 own the land they cultivate. The farms are small and are highly cultivated. Forests cover 21 per cent. of the whole surface of the kingdom. They consist largely of Scotch fir, spruce, and birch. The annual production is about 344,000,000 cubic feet. The restrictions imposed before 1860 were removed in that year because they checked the timber industry. The wholesale cutting down of trees that then followed threatened to denude the country of forests, and in 1893 new laws were passed for their preservation. The state purchased large tracts of forest land, and is making systematic efforts to restore large areas that have been stripped of their timber. While the foreign commerce of Norway has quadrupled in half a century, the mercantile tonnage is nine times as great as in 1850, and in proportion to population surpasses that of every other country, being exceeded only by that of Great Britain, Germany, and the United States. About 20 per cent. of the population are engaged in industrial occupations, and the exportation of manufactures has gone up from 1,500,000 kroner in 1865 to 45,000,000 kroner. Copper, silver, nickel, iron, and zinc are mined, but the ores are not rich, and coal is found only on the island of Andøen. The total mineral output in 1897 was only 3,000,000 kroner.

Railroads, Posts, and Telegraphs.—The Government railroads in operation in 1899 had a total length of 1,230 miles, besides which there were 93 miles of private railroads. The Government railroads in 1898 carried 7,706,516 passengers and 1,679,483 tons of freight; receipts were 10,792,758 kroner, and expenses 7,808,320 kroner.

The postal traffic in 1899 was 36,700,000 internal and 11,776,300 international letters and postal cards; 2,435,600 internal money letters, containing 349,800,000 kroner, and 75,300 foreign ones, containing 23,400,000 kroner; and 54,553,900 internal and 5,369,200 international newspapers and circulars. The receipts were 4,821,662 kroner, and the expenses 4,577,533 kroner.

The state telegraphs in 1899 had a total length of 7,487 miles, with 17,641 miles of wire; other lines a length of 1,178 miles, with 2,098 miles of

wire. The number of internal dispatches was 1,418,107; of international dispatches, 818,062; service dispatches, 25,657; receipts, 2,216,485 kroner; expenses, 2,171,510 kroner.

Storthing Elections.—The general election was held early in September. The new Storthing was made up of 77 members of the Left and 37 members of the Right and Moderates. In the election of 1897 the Radicals, who had numbered previously 59, and had only a narrow majority in a house of 114 members, won 79 seats, and had therefore a two-thirds majority, which they still retain in the Storthing elected in 1900, but only by a single vote. Christiania, which in the former elections the Left won over, the Right regained, the large Socialist vote having reduced the Radical strength. The wave of national feeling that produced the excitement in the last election over the question of the relations with Sweden had somewhat subsided, and the element of the Radical party that was most determined to secure a separate consular representation for Norway and other rights pertaining to an independent nation lost faith in the Radical Premier because he had failed to advance their cause by a single step. The elections were held for the first time under the law of universal suffrage. The Left put forth a programme calculated to attract the new voters, containing among other propositions that were not approved by all adherents of the party a plan for insuring the entire Norwegian people against want in old age. The working people in Christiania nevertheless set up candidates of their own. The Right showed unexpected strength in the rural districts, the Socialist programme of the Left having alienated many of the agricultural voters. The Storthing was opened on Oct. 24 by the Crown Prince, who acted as Regent on account of the King's illness. On Nov. 3, Ministers Holst, Nysom, Löchen, and Thilesen having resigned, ex-Minister Konow was appointed Minister of Agriculture; Lieut.-Col. Stang, Minister of National Defense; Capt. Sparre, member of the Delegation of the Council of State sitting at Stockholm; and M. Aarstad, Minister of Finance.

SWITZERLAND, a federal republic in central Europe. The legislative power is vested in the Federal Assembly, made up of the National Council of 147 members, elected by direct universal suffrage for three years, and the States Council of 44 members, representing the cantons, in some of which they are elected by the direct vote of the people, in others by the cantonal legislative bodies. The executive authority is vested in the Federal Council, consisting of 7 members elected for three years by the Federal Assembly, and from among the Federal Council the President of the Confederation and the Vice-President, who by custom is chosen President for the next succeeding term, are elected annually. The Federal Council for the term beginning in 1900 was composed as follows: President of the Confederation and Chief of the Political Department, W. Hauser, of Zurich; Vice-President and Chief of the Department of Justice and Police, Dr. E. Brenner, of Basel; Military Department, E. Müller, of Bern; Department of the Interior, M. E. Ruchet, of Vaud; Department of Commerce, Industry, and Agriculture, Dr. A. Deucher, of Thurgau; Department of Posts and Railroads, Dr. J. Zemp, of Luzern; Department of Finance and Customs, R. Comtesse, of Neuchâtel.

Area and Population.—Switzerland has an area of 15,976 square miles, with a population estimated in the middle of 1898 at 3,119,635. The number of marriages in 1899 was 22,669; of births,

98,113; of deaths, 58,052; excess of births, 40,061. The number of emigrants over sea in 1899 was 2,493, of whom 2,168 emigrated to the United States, 3 to Central America, 266 to South America, 9 to Australia, 10 to Asia, and 37 to Africa. The emigration in 1898 was 2,288; in 1897, 2,508; in 1896, 3,330; in 1895, 4,268; in 1894, 3,849; in 1893, 6,177. The population of Zurich in the middle of 1900 was 165,689; of Basel, 106,433; of Geneva, 92,969.

Finances.—The revenue of the Federal Government in 1899 amounted to 100,476,336 francs, of which 665,048 francs were derived from real property; 2,015,443 francs from invested capital; 66,273 francs from the general administration; 34,383 francs from the Political Department; 522,285 francs from the Department of the Interior, Justice, and Police; 3,164,540 francs from the Military Department; 51,316,600 francs from the Department of Finance and Customs, of which 224,846 francs came from bank notes and 51,091,754 francs from customs; 378,509 francs from the Department of Industry and Agriculture; 42,296,310 francs from the Department of Posts and Railroads, of which 33,977,310 francs came from the post office, 8,072,100 francs from telegraphs and telephones, and 246,900 francs from railroads; and 16,945 francs were accidental receipts. The total expenditures in 1899 amounted to 98,052,644 francs, leaving a surplus of 2,423,692 francs. Of the expenditures, 4,248,118 francs were for interest on the public debt and amortization; 1,108,281 francs for the general administration, of which 217,247 francs were for the National Assembly, 26,666 francs for the States Council, 84,960 francs for the Federal Council, 427,611 francs for the Federal Chancellery, and 351,797 francs for the Federal Tribunal; 644,428 francs for the Political Department; 13,826,944 francs for the Department of the Interior, of which 135,428 francs were for the Statistical Bureau, 105,638 francs for the Health Office, 1,018,389 francs for the polytechnic school, 11,073,003 francs for buildings, and 1,494,486 francs for other expenses; 418,943 francs for Justice and Police; 27,472,117 francs for the Military Department; 4,842,903 francs for the Department of Finance and Customs, of which 347,850 francs were for administration and 4,495,053 francs for collection of customs; 4,622,033 francs for the Department of Industry and Agriculture; 40,848,874 francs for the Department of Posts and Railroads, of which 31,188,874 francs were for the postal service, 9,230,497 francs for telegraphs and telephones, and 429,506 francs for railroads; and 20,003 francs were unforeseen expenditures.

The debt of the federation on Jan. 1, 1900, amounted to 90,039,639 francs, consisting of loans amounting to 69,254,000 francs, 7,556,451 francs for currency reserve, and 13,229,188 francs of other obligations. The assets, including 31,114,001 francs of special funds, amounted to 214,229,175 francs, exceeding the debt by 124,189,536 francs.

The Army.—From the age of twenty to that of thirty-three every Swiss citizen is bound to serve in the Auszug, and from then till he is forty-four years old he belongs to the Landwehr. Service in the Auszug consists in a course of military instruction lasting two or three months, and afterward an annual drill, for the cavalry lasting ten days, and for the other arms three weeks. Those who wish to be exempted must pay 6 francs for a certificate of release and an annual tax varying according to the amount of their fortunes, in the case of some reaching 3,000 francs a year. The strength of the Auszug on Jan. 1, 1900, was 150,876 men; of the Landwehr, 62,789 men in the first and 24,575 in the second division.

Commerce and Production.—There are about 300,000 cultivators in Switzerland who own their land. There were 260,407 quintals of cheese and 203,528 quintals of condensed milk exported in 1898. The wine from 29,984 hectares of vineyards amounted to 854,762 hectolitres, valued at 40,234,267 francs. There were 108,969 horses, 4,851 mules and asses, 1,306,696 cattle, 271,901 sheep, 415,817 goats, and 586,974 pigs in 1896. The forests cover 2,051,670 acres, of which 1,119,270 acres are protected from destruction by the federal authorities. In 1898 there were 8,872,238 trees planted. There are 150 fish hatcheries, which produced 27,636,000 fry in 1898. The production of the salt mines was 432,187 quintals. The quantity of beer made in 267 breweries was 2,118,123 hectolitres. The alcohol *répée* sold 68,945 quintals of spirits for drinking and 45,021 quintals of medicated spirits.

The special imports of merchandise in 1899 were 1,162,595,000 francs in value, and exports 796,014,000 francs; the imports of specie were 124,047,000 francs, and exports 69,653,000 francs, making the total value of imports 1,286,642,000 francs, and of exports 865,667,000 francs. The importation of raw silk was 162,000,000 francs; of cereals, including flour, 117,100,000 francs; of coal, 55,700,000 francs; of woollens, 50,400,000 francs; of iron, 47,500,000 francs; of animals, 47,400,000 francs; of precious metals, 43,100,000 francs; of chemical products, 38,800,000 francs; of wine, 37,000,000 francs; of cotton goods, 35,600,000 francs; of machinery, 34,500,000 francs; of iron manufactures, 30,200,000 francs; of raw cotton, 27,700,000 francs; of sugar, 22,500,000 francs; of timber, 22,300,000 francs; of wool, 18,000,000 francs; of barley, malt, and hops, 16,800,000 francs; of leather, 15,800,000 francs; of building materials, 13,900,000 francs; of coffee, 12,200,000 francs; of petroleum, 11,800,000 francs; of books, 11,500,000 francs; of eggs, 11,200,000 francs; of silk manufactures, 11,000,000 francs; of linens, 10,400,000 francs. The exports of silk manufactures in 1899 were 165,600,000 francs in value; of cotton manufactures, 136,200,000 francs; of watches, 113,500,000 francs; of machinery, 44,800,000 francs; of raw silk, 44,000,000 francs; of cheese, 40,200,000 francs; of silk yarns, 29,800,000 francs; of chemical products, 28,800,000 francs; of milk, 21,300,000 francs; of cotton yarns, 18,700,000 francs; of straw goods, 11,200,000 francs; of hides, 10,600,000 francs; of animals, 10,400,000 francs; of woollen yarns, 9,500,000 francs; of precious metals, 9,000,000 francs; of woollen manufactures, 8,400,000 francs; of jewelry, 7,500,000 francs.

The values in francs of the merchandise imports from and exports to the different foreign countries in 1899 are given in the following table:

COUNTRIES.	Imports.	Exports.
Germany	345,905,000	198,581,000
France	214,207,000	96,288,000
Italy	191,344,000	41,981,000
Great Britain	56,431,000	165,943,000
Austria-Hungary	76,601,000	45,496,000
Russia	57,122,000	31,661,000
Belgium	28,721,000	18,470,000
Spain	15,999,000	15,012,000
Netherlands	3,769,000	5,692,000
Rest of Europe	9,330,000	23,583,000
United States	61,637,000	91,699,000
Rest of America	31,658,000	22,294,000
Asia	42,473,000	30,555,000
Africa	17,736,000	6,836,000
Australasia	10,062,000	3,267,000
Not indicated .....	.....	4,166,000
Total	1,162,595,000	796,014,000

Railroads, Posts, and Telegraphs.—The railroads in the Swiss republic had a total length on

Jan. 1, 1899, of 2,440 miles. Their cost up to 1898 was 1,210,931,534 francs. Receipts in 1897 were 124,084,175 francs, and expenses 75,263,964 francs. In 1898 the gross earnings from a traffic of 49,543,857 passengers and 13,170,752 tons of freight were 116,980,890 francs. It was decided on Feb. 20, 1898, that the Federal Government shall acquire the railroads and take possession before May, 1903.

The post office in 1899 forwarded 94,791,000 internal and 44,035,000 international letters, 33,717,000 internal and 22,401,000 international postal cards, 37,865,000 internal and 25,003,000 international newspapers and circulars, 5,491,000 internal postal orders for 603,364,000 francs, and 1,173,000 international ones for 53,769,000 francs.

The telegraphs of the Government had a length of 4,380 miles, with 13,375 miles of wire, in 1899, and during that year 1,660,994 internal and 1,698,030 international messages were sent, besides 610,074 in transit and 156,633 service dispatches. There were 288 telephone networks in 1898, with 7,865 miles of line and 38,630 miles of wire, and the number of conversations during the year was 16,335,332. The long-distance telephone wires had a length of 8,035 miles, and the number of conversations between towns was 3,634,244.

Legislation.—The Federal Assembly having passed an act providing for the compulsory insurance, with aid from the federal treasury, of all persons who have no independent means of livelihood against accident and sickness, a demand for a referendum was signed by more than the requisite 30,000 citizens, and the law was referred consequently to the popular vote. This turned out to be opposed to the scheme, less than a third of the total vote being cast in its favor, and of all the cantons only one giving approval. Proposals in the Federal Assembly to curtail the military budget were either rejected or withdrawn. The Chief of the Military Department proposed compulsory naturalization, on pain of having to leave Switzerland, of persons capable of military service who settle in the country without having discharged their military duties in their native land. This was intended to make the Swiss practice uniform with that recently adopted in Germany. Several Swiss citizens of military age residing in Prussia were notified that unless they could prove that they had done military service at home they must apply for naturalization and thereby render themselves liable to the German conscription; otherwise they would be expelled from German territory. The Federal Council raised objections to the proceeding as contrary to treaty. The Prussian Government replied that the article of the treaty permitting the expulsion of persons dangerous to the internal or external security of the state justified the action because young Swiss residents in Prussia who are entirely free from military obligations necessarily have a demoralizing influence on Prussian subjects of the same age who are compelled to serve in the army. The Federal Council protested in vain that dangerous political activity was what the article was intended to guard against. The only concession that the German Government would make was to accept proof from Swiss settlers in Germany that they have paid the tax for exemption as evidence that they have discharged their military duties. In the law framed by M. Müller it was therefore provided that when a legal equivalent has been furnished in lieu of personal military service a foreigner residing in Switzerland will not be disturbed. Two constitutional amendments were submitted to a referendum on Nov. 4. The right of demanding a revision of the federal organic law

was secured to the people by the Constitution of 1848. The federal authorities having decided in 1880 that a demand for the amendment of specific articles or the insertion of new ones was invalid, that only a general revision could be obtained by popular initiative, a new law was framed in 1891 which provided that the repeal or modification of particular articles of the federal Constitution as well as the insertion of new constitutional clauses may be demanded through the medium of popular initiative; that as soon as 50,000 Swiss citizens having the right to vote should present a demand of this kind the question whether such a revision take place should be put to the electors, and the answer would depend upon the majority of the citizens taking part in the vote, and should the answer be in the affirmative the Federal Assembly was to proceed with the revision. The Conservatives, the Socialists, the Democrats, and some of the Radicals objected to this proposal because it left the Chambers free to tamper with the expression of the popular will by drafting a measure calculated to defeat or to give only partial effect to the demand of the people. They proposed to confer on 50,000 electors the right of presenting an amendment or a new clause fully drafted which should be submitted to the people and, if approved, inserted in the Constitution in its original form. Although the Liberals protested against allowing irresponsible persons to formulate bills altering the fundamental laws and by skillful agitation to secure the approval of the people without the careful study and the public discussion which the least important bills of the Federal Assembly must undergo, nevertheless the formulated initiative was approved by the Council of State and the National Council, and on July 5, 1891, the Swiss people, by a vote of 181,882 to 120,372, adopted the law by which a partial revision of the Constitution can be submitted to a referendum in the form of a formulated draft of the proposed amendment or new clause. Only the rural half canton of Basel, the half canton of Appenzell Outer Rhodes, and the cantons of Aargau, Thurgau, and Vaud gave a majority against the law. The Conservative and Socialistic alliance, which with the support of a part of the Radical and Democratic center party carried through the formulated initiative, proposed two further amendments embodying what is called the double initiative, intended to make the legislative and executive authorities of the federation really representative of the nation. The party of the Right and the party of the Extreme Left affirm that the Federal Assembly and the Federal Council are not organs of the national will, composed as they are at present composed. The system of election by majorities, which places the Radical party in control of Parliament and thus enables it to select the members of the Federal Council, did not seem to members of the parties which for years have commanded between them a majority of the voters of the nation and which have been acting in concert to be the right system to secure true popular representation. The Federal Council and its decisions have been subjected to severe criticisms, and its opponents have for a long time asserted that it had lost the confidence of the nation and that there existed against it a deep general dissatisfaction. The double initiative, which would give every interest and every group of political thinkers, even the smallest, its due weight in shaping the legislation of the country and would create a truly democratic national executive, in which only those who are most trusted by the greatest number of citizens can become members of the Federal Government, con-

sists in proportional representation in the National Council and the election of the Federal Council by the direct vote of the people. The proposed amendments to the Constitution by which these changes in the governmental system of the country were to be effected, after a long period of agitation and popular discussion, were submitted to the decision of the people on Nov. 4, 1900. Both proposals were rejected, proportional representation in the National Council by 242,004 popular votes to 163,548 and by 11½ cantonal votes to 10½, the election of the Federal Council by the people by 264,087 popular votes to 134,167 and by 14 against 8 of the cantons. Even cantons that have adopted proportional representation for themselves, such as Solothurn and Neuchâtel, gave a majority against such an innovation in the national representation, and the places where the new democratic theories were cradled, the town of Basel and the town and canton of Bern, rejected their immediate application in the federal government. The popular disaffection toward the statesmen who have managed the public business was not so great but that the people preferred to trust to their practical ability and experience the nationalization of the railroads, the arrangement of new commercial treaties, and other economical questions for the solution of which a tranquil state of the public mind is desirable. The task of improving the military resources of the republic so as to increase its power of resistance to any possible aggression on the part of the powerful states by which the confederation is surrounded engages the study of the authorities with the entire approval of the citizens. The Federal Assembly by the vote of both its branches declined to ratify that part of the resolutions of the Hague Peace Convention which seems to curtail or to fetter the right of a nation to resort to a general levy of its men for the defense of the country. It was decided to retain the system of the *levée en masse* and to make it as effective as possible by more rigorous provisions. In December the National Council approved an agreement made by the Federal Council and the railroad company for the transfer of the Central Railroad, the first of the five great railroad lines to be taken over. The policy of the nationalization of the railroads on both military and economical grounds has been authorized by the Swiss people in referendum by an overwhelming majority. If the Government and the stockholders are not able to agree upon a price in the case of any of the railroads, the matter will be taken before the Federal Court of Appeal. The Federal Council desired to complete the arrangements for the acquisition before the end of 1901 of all the Swiss railroads with the exception of the St. Gothard line, which can not be acquired before 1909. The struggle of the Boer republics in South Africa attracted much attention in Switzerland, chiefly from the point of view concerning the Swiss national defense. Proposals to intervene diplomatically appealed to some as comporting with the traditional efforts of the Swiss Government to further disinterestedly the peace of nations, but they were rejected by the legislative bodies. In reply to the request for mediation which the Boer republics made to Switzerland as to other powers, the Federal Council declined, in

March, to take any initiative in the matter since the British Government had already refused to conclude peace on the basis of the independence of the republics and had declared to the Cabinet at Washington that it would not accept the intervention of any power.

The Institute of International Law, which held its annual meeting in September at Neuchâtel, discussed the bearings of the Chinese situation in connection with the question as to what are the rights and duties of foreign powers and their subjects, in case of an insurrection, with reference to the established Government which is attacked by the insurgents. Prof. Westlake proposed to insert words that would limit the operation of the principles recommended by the committee to "states that are sharers in European civilization." M. Rolin-Jacquemyns objected to the phrase as possibly excluding Japan and Siam. A similar objection was made to the phrase "Christian civilization." In the *projet de règlement* that was finally adopted no qualifying phrase was used, the principle being accepted that, in the absence of any provision to the contrary, the rules voted by the Institute are applicable only to "normal" states, full members of the family of nations. A distinction between "just" and "unjust" insurrections was also rejected. Nonintervention in insurrections was declared to be an absolute duty. Not even a formal declaration of the intention to intervene can, according to the decision of the Institute, give the sanction of international law to intervention between a state and those subject to its jurisdiction, Prof. Holland's amendment having been voted down. Foreign governments must not furnish rebels with arms or munitions of war, though they are not bound to prevent export by private individuals, nor can a government allow the organization within its territories or waters of an expedition in aid of insurgents; for an export of arms unaccompanied by the men who are to use them, however, a government can not be held liable, Prof. Holland's amendment to that effect being approved. A government may mete out the same punishment to foreigners taking part in an insurrection against its authority as it can to its own subjects, but on the motion of Prof. Catellani this does not apply to cruel or excessive punishments. When a state recognizes its insurgent subjects as belligerents this does not necessitate similar action on the part of other states; but a third state is bound to respect a blockade established by insurgents who have been so recognized, and must allow its vessels to be visited by the war ships of either party. The theory of *renvoi*, the application of foreign rules of law to the decision of legal relations of foreign origin which are not covered by domestic legislation, was condemned. The responsibility of a state for injuries sustained by foreigners through riot or civil war was the subject of much discussion. Occurrences in South America have made the question one of practical interest, and considerable difficulty is presented in the case of a federal government which labors under a constitutional inability to oblige one of its constituent states to give compensation or inflict penalties for what has occurred within the territory and jurisdiction of such state.

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TENNESSEE, a Southern State, admitted to the Union, June 1, 1796; area, 42,050 square miles. The population, according to each decennial cen-

sus since admission, was 105,602 in 1800; 261,727 in 1810; 422,771 in 1820; 681,904 in 1830; 829,210 in 1840; 1,002,717 in 1850; 1,109,801 in 1860;

1,258,520 in 1870; 1,542,369 in 1880; 1,767,518 in 1890; and 2,020,616 in 1900. Capital, Nashville.

Government.—The following were the State officers in 1900: Governor, Benton McMillin; Secretary of State, William S. Morgan; Treasurer, Edward B. Craig; Comptroller, Theodore F. King; Superintendent of Agriculture, Thomas H. Paine; Superintendent of Instruction, Morgan C. Fitzpatrick; Adjutant General, Horton C. Lamb; Attorney-General, G. W. Pickle; Commissioner of Labor, Robert A. Shifflett; Live Stock Commissioner, W. H. Dunn; Factory Inspector, Martin J. Noonan; Railroad Commissioners, N. W. Baptist, J. N. McKenzie, and Thomas L. Williams; Prison Commissioners, W. M. Nixon, John H. Trice, who resigned and was succeeded in August by W. A. Carter, and A. J. McWhirter; Librarian, Jennie Lauderdale; Chief Justice of the Supreme Court, David L. Snodgrass; Associate Justices, W. C. Caldwell, John S. Wilkes, W. K. McAllister, W. D. Beard; Clerk, A. W. McMillin; Justices of the Court of Chancery Appeals, M. M. Neil, S. F. Wilson, R. M. Barton, Jr.; Clerk, James Turney. All are Democrats.

State elections are held biennially in November of the even-numbered years. The Legislature meets biennially in January of the odd-numbered years.

Population.—The increase in population during the past decade is 14.3 per cent. Of the counties, 8 show a decrease. The population by counties was as follows: Anderson, 17,634; Bedford, 23,845; Benton, 11,888; Bledsoe, 6,626; Blount, 19,206; Bradley, 15,759; Campbell, 17,317; Cannon, 12,121; Carroll, 24,050; Carter, 16,688; Cheat-ham, 10,112; Chester, 9,896; Claiborne, 20,696; Clay, 8,421; Cocke, 19,154; Coffee, 15,574; Crockett, 15,867; Cumberland, 8,311; Davidson, 122,815; Decatur, 10,439; DeKalb, 16,460; Dickson, 18,635; Dyer, 23,776; Fayette, 29,701; Fentress, 6,106; Franklin, 20,392; Gibson, 39,408; Giles, 33,035; Granger, 15,512; Greene, 30,596; Grundy, 7,802; Hamblen, 12,728; Hamilton, 61,695; Hancock, 11,147; Hardeman, 22,976; Hardin, 19,246; Hawkins, 24,267; Haywood, 25,189; Henderson, 18,117; Henry, 24,208; Hickman, 16,367; Houston, 6,476; Humphreys, 13,398; Jackson, 15,039; James, 5,407; Jefferson, 18,590; Johnson, 10,589; Knox, 74,304; Lake, 7,368; Lauderdale, 21,971; Lawrence, 15,402; Lewis, 4,455; Lincoln, 26,304; Loudon, 10,838; McMinn, 19,163; McNairy, 17,760; Macon, 12,881; Madison, 36,333; Marion, 17,760; Marshall, 18,763; Maury, 42,705; Meigs, 7,491; Monroe, 18,585; Montgomery, 36,017; Moore, 5,706; Morgan, 9,875; Obion, 28,286; Overton, 13,353; Perry, 8,800; Pickett, 5,366; Polk, 11,351; Putnam, 16,890; Rhea, 14,318; Roane, 22,738; Robertson, 25,029; Rutherford, 33,543; Scott, 11,077; Sequatchie, 3,326; Sevier, 22,021; Shelby, 153,557; Smith, 19,026; Stewart, 15,224; Sullivan, 24,935; Sumner, 26,072; Tipton, 29,273; Trousdale, 6,040; Unicoi, 5,871; Union, 11,894; Van Buren, 3,126; Warren, 16,410; Washington, 22,604; Wayne, 12,936; Weakley, 32,546; White, 14,157; Williamson, 36,429; Wilson, 27,078.

Nashville has a population of 80,865; Chattanooga, 32,490; Memphis, 102,320.

Finances.—The following data are from the Treasurer's and the Comptroller's biennial reports: Balance in the treasury Dec. 19, 1898, \$85,071.41; received from all sources from Dec. 20, 1898, to Dec. 19, 1900, \$6,120,231.44; total, \$6,205,302.85. Paid out on Comptroller's warrants from Dec. 20, 1898, to Dec. 19, 1900, \$6,095,299.87. Balance in the treasury Dec. 19, 1900, \$110,002.98.

Included in the receipts and disbursements shown above are amounts credited and charged to

loan account, receipts from the Penitentiary, and amounts paid out for maintenance of convicts. Omitting these, it is seen that the net receipts in 1899 were \$1,901,976.32; the net disbursements, \$1,788,031.23; the net receipts in 1900, \$2,069,624.98; net disbursements, \$1,801,911.44.

The receipts for the two years exceeded the disbursements \$381,658.63; the Penitentiary receipts over disbursements were \$268,272.94; total, \$649,931.57. Out of this amount were paid Funding Board notes amounting to \$625,000; balance, \$24,931.57.

This balance is represented by an increase of cash on hand Dec. 19, 1900, over Dec. 19, 1898.

The main expenditures for 1900 were: Pensions for disabled soldiers, \$92,742; State Normal College, \$22,856.61; Attorneys-General salaries, \$38,317.61; Tennessee Industrial School, \$60,245.55; maintenance of convicts, \$260,735.42; loan account, \$600,000; State prosecutions, \$145,298.42; interest on State debt, \$547,616; interest on school fund, \$139,350.36; judicial salaries, \$102,743.77; hospitals for the insane—Middle Tennessee \$54,188.77, West Tennessee \$70,793.37, East Tennessee \$52,578.24; School for the Deaf and Dumb, \$42,281.46; School for the Blind, \$32,418.48; Bureau of Agriculture, Statistics, and Mining, \$14,544.75.

The receipts from county trustees, being the property tax for the two years 1899-1900, were \$1,914,700.06, showing an increase over the two previous years, 1897 and 1898, of \$460,190.22. Railroad taxes collected in 1899 amounted to \$198,418.31; for 1900, \$195,402.41.

The total debt of the State is \$17,023,600. Of this, \$13,528,600 is in 3-per-cent. bonds; the remainder of the interest-bearing debt is at higher rates.

The total valuation for assessment in 1900 was \$340,359,148; the State tax, \$1,221,256.

Education.—Among the facts given in the biennial report of the Superintendent of Education are the following: The number of children in the State between the ages of six and twenty-one years is 768,343. Of this number, 573,287 are white, 195,556 colored. The total enrollment is 485,354. The average school term is nearly five months, an increase of one half month during the present administration. The average salary paid teachers per month is more than \$30 (an increase). There are 7,954 schools and 9,195 teachers. The value of school property is, as estimated, \$3,063,568. The schools throughout the State use uniform text-books selected by a State text-book commission.

For a number of years the State has contributed to the support of the Peabody Normal College, in Nashville, conducted as the University of Nashville and Peabody Normal College. The grounds, buildings, etc., with some small sum of money, are given by the University Board; an annual appropriation of \$20,000 is made by the Legislature and expended under the direction of the State board.

The number of students this year was 602.

Among the material improvements during the year at the University of Tennessee are a dairy laboratory and a dormitory for woman students. The attendance in the regular college classes, together with graduates, special students, State students at Knoxville College, and students in the agricultural short course, was 369; in the law department, 56. The total in all departments at Nashville and Knoxville was 750; the number of degrees conferred, 150.

At the State Industrial School there were remaining, Dec. 19, 1899, 760 pupils, of whom 471 are white boys, 224 girls, and 65 colored boys. During the year the income from various sources

was \$90,404.85. This includes the special appropriation of \$10,760.65 made by the General Assembly of 1899, and of which was expended for an addition to the girls' building \$5,000; insurance, \$2,500; steam cooking appliances, electric plant, and enlargement of gas plant, \$3,260.65.

The total attendance at the Deaf and Dumb School was 235; the average, 224.

The fifty-sixth session of the Blind School, ending in June, 1900, was the most prosperous in the history of the school; 205 pupils were enrolled.

Vanderbilt University celebrated its twenty-fifth anniversary, Oct. 22. It received this year a large bequest from Mrs. Mary J. Furman, of Nashville.

At Central Tennessee College, Nashville, 540 were enrolled and 73 were graduated.

Roger Williams University had 268 students, of whom 117 were women.

Lane College, for colored students, in Jackson, has sent out 116 graduates from the normal department since it was organized, in 1878.

The last General Assembly provided in the appropriation bill that each Senator should designate two colored persons, either male or female, to scholarships. The appointment entitles the holder to receive \$50 per annum for two years. The institutions for the colored designated by the State Board of Education under former legislative provisions to receive these scholarship students are Roger Williams University, Fisk University, Central Tennessee College, LeMoyne Institute, Lane College, Morristown Normal College, Freedman's Normal Institute, and Athens Academy. When a person receives a scholarship appointment he can select either of these colleges.

The General Assembly two years ago appropriated \$2,500 annually for teachers' institute work. This appropriation was supplemented each year by a donation of \$1,200 by the Peabody Board of Trust. Six institutes for whites were held, and three for colored teachers.

Charities and Corrections.—The financial report of the Central Hospital for the Insane shows the balance on hand Dec. 19, 1900, to be \$2,448.79. Other statistics were as follow: Total receipts for the two years were \$145,050, divided as follow: Balance Dec. 19, 1898, \$10,606.07; appropriation for 1899, \$51,709.29; for 1900, \$54,332.66; from 10 counties for pay patients, \$6,635.38; private pay patients, \$18,162.80; farm articles sold, \$3,803.80. The disbursements were, from Dec. 19, 1898, to December, 1899, \$69,289.31; from December, 1899, to Dec. 19, 1900, \$73,511.40; total, \$142,801.21.

The statistics of the State Prison, as given by the Prison Commissioners, include the following items: On Dec. 1, 1898, there were on hand 1,525 prisoners. There were received and recaptured during the year 1,596. There were on hand Dec. 1, 1900, 1,744 prisoners, composed of 1,516 State and 228 United States prisoners, being 1,110 in the main prison and 634 at Brushy mountain. State prisoners—white males, 403; colored males, 1,057; colored females, 52; white females, 3. United States prisoners—white males, 138; colored males, 84. Total, 1,744.

Of the 1,551 prisoners received during the two years, there are: College graduates, 22; common-school education, 89; read and write, 178; read, 519; no education, 743.

The main prison is described as a little manufacturing city of 10 industries, consisting of a foundry, harness factory, chair and carriage factory, box factory, shoe factory, hosiery mill, brick manufactory, and the commissioner's manufacturing department. One of the most important features of the work coming under the jurisdiction of the commission is that performed at Brushy

mountain coal mines. There has been produced for the years 1896, 1897, 1898, 1899, and 1900 over 1,116,000 tons of coal, and the entries have been driven nearly 17 miles.

All the prisoners of the penitentiary system are now confined at the main prison and at Brushy mountain.

Militia.—By the annual statement of the Adjutant General's office, it appears that Tennessee has an organized military force of 14,000 men.

Railroads, Telegraphs, and Telephones.—Full statistics of the roads and lines are given in the biennial report of the Railroad Commission. The total mileage of roads is 3,132, of which 2,947 is main line track. During the past two years fifty-four and a fraction miles have been constructed. The entire assessed valuation of the lines in Tennessee is \$55,295,972.94, of which \$52,943,494.44 is distributable and \$2,352,478.50 localized property. The total amount of tax payable per mile of railroad property is \$250.32, divided as follows: State, \$65.66; county taxes, \$159.91; city taxes, \$24.65. The total State tax collected each year is \$201,410.70; total city or municipal, \$73,452.40; total county, \$474,144.78, making a grand total of \$749,007.90 taxes paid by the Tennessee railroads.

There are but two telegraph companies operating in the State, the Western Union and the Postal. The Postal has 1,900 miles of lines, the assessment footing up \$36,070.60. The Western Union Company has 13,820 miles of line, valued at \$621,930.

The total telephone valuation is \$628,220.20. There are 11 lines, with a mileage of 10,240.

An election was held in Nashville, Dec. 15, on a proposition to subscribe \$1,000,000 to the capital stock of the Nashville, Florence and Northern Railroad. The election resulted in a vote of 5,717 for to 934 against the subscription.

Insurance.—Attention has been called to the fact that there are no life and few fire companies in the State, those which have from time to time been organized having failed or gone out of business. This is said to be due in part to the fact that the companies, besides paying a full property tax, also pay an income tax upon their gross receipts nearly as large as the tax paid by the foreign companies that pay no local or property tax in the State. The 29 life companies doing business in the State in 1899 received in premiums \$2,512,091.90, and paid in losses \$1,161,098.68.

Products.—The coal product in 1900 amounted to 3,500,000 tons. For 1899 the figures of mineral production given by the Commissioner of Labor were: Coal, 3,736,134 tons; coke, 440,157 tons; iron, 667,144 tons; copper, 100,022 tons; zinc, 3,750 tons; barytes, 14,000 tons; phosphate, 462,561 tons. At the time of the report there were in the State 100 coal mines, 15 of which are new ones opened during the year. New discoveries of deposits of lead, zinc, and copper have been reported. The number of phosphate mines has been doubled, the reports showing 15 in 1899 and 30 in 1900. The production shows but little increase, however.

The cotton acreage this year was given as 814,260; the consumption in mills, 37,747 bales. The number of spindles is 172,213.

The report of the Commissioner of Agriculture shows that \$33,403.95 was received from the sale of fertilizer tags.

The Cumberland.—At the Cumberland River Improvement Convention, in November, resolutions were adopted asking for appropriations to furnish slack water from the mouth of the Cumberland to Nashville, 190 miles, and from Nashville to

West Point, in the upper Cumberland, 125 miles. This work can be completed within three years, and at a cost of \$2,750,000.

Lawlessness.—A toll keeper's house was destroyed by a mob near Mount Pleasant, in March. The toll gate had been erected recently, despite a popular protest.

Lynchings of negroes were reported at Ripley in January, at Fayetteville in August, and at Tiptonville in October.

While attempting to capture an illicit still in Polk County, in December, a deputy marshal was attacked by mountaineers. One of his men was killed, and himself and another were seriously wounded.

Tornado.—A disastrous tornado swept over the vicinity of Columbia, in Middle Tennessee, in November. As many as 50 were killed, 100 were injured, and much property was destroyed.

The Anticigarette Law.—The question of the validity of this law came before the Supreme Court of the State, and it was pronounced constitutional. On an appeal to the United States Supreme Court this decision was upheld, though four of the judges dissented.

Political.—A Governor and a Railroad Commissioner were elected in November. There were five candidates for the former office.

The People's party held a convention in April, at Nashville. The important question was, whether delegates should be sent to the national convention at Cincinnati for independent party action or to Sioux Falls for fusion with the Democrats. The Mid-Road wing prevailed, and delegates were chosen for Cincinnati. The choice of a gubernatorial candidate was left to the executive committee, who named H. J. Mullins.

The Republican party was divided into the so-called Brownlow and Evans factions. Contesting delegations were sent to the State convention, April 19, resulting in a bolt of the Evans men, two delegations to the national convention, and two State tickets. The Brownlow candidate for Governor was John E. McCall, and for Railroad Commissioner, W. C. Hornsby. The Evans candidates were W. F. Poston for Governor and W. S. Tipton for Railroad Commissioner.

Both platforms commended the policy of the national administration, called for suppression of trusts, and denounced the Democratic administration of the State. The Brownlow platform condemned especially the election laws, which, it was declared, "differ in no essential particular from the Goebel election law of Kentucky, which has become a stench in the nostrils of American citizens throughout the land." Further, it favored the prohibition of child labor, abolition of the inspection fee required of factory owners, and amendment of the penal code so as to raise the grade of petty larceny to \$50.

The Evans platform commended the service of Mr. Evans in the pension office; condemned the State road law; called attention to the fact that while taxation had increased, "no part of the corpus of the public debt" had been paid; and condemned that part "of the Jarvis law which compels the attendance of witnesses by process of the court, and makes their compensation dependent upon the conviction of criminals."

The national committee heard the contest cases at Philadelphia, and gave Brownlow 16 delegates and Evans 8. The Evans men decided not to carry the contest further. The struggle in the State continued for some time, but at the election Mr. McCall was the only Republican candidate for Governor, with Thomas L. Cate for Commissioner.

The Democratic convention was held at Nashville, May 10, and renominated Gov. McMillin and Commissioner Thomas L. Williams. There was some disagreement over the resolution on expansion; as reported by the committee, it was declared by some of the delegates to be Republican rather than Democratic doctrine, and after discussion 10 names were added to the committee, and the resolution was amended so as to be satisfactory to the convention majority.

The resolutions declared against trusts, in favor of the Nicaragua Canal, prohibition of child labor, abolition of the factory inspection fee, and raising the grade of petty larceny; they declared allegiance to the Chattanooga platform of 1898, approved Gov. McMillin's administration, under which \$1,000,000 of State indebtedness had been paid, and favored the nomination of Mr. Bryan.

The other nominations for the office of Governor were: Prohibitionist, R. S. Cheves; Social-Democratic, C. H. Stockwell.

The vote for presidential electors stood: Bryan, 144,751; McKinley, 121,194; Woolley, 3,900; Barke, 1,368; Debs, 410. For Governor: McMillin, 145,708; McCall, 119,831; Cheves, 3,378; Mullins, 1,269; Stockwell, 257.

There were three candidates for United States Senator, but two of them—Gov. McMillin and Judge Snodgrass—withdrew, leaving only E. W. Carmack as declared candidate.

TEXAS, a Southern State, admitted to the Union Dec. 29, 1845; area, 265,780 square miles. The population, according to each decennial census since admission, was 212,592 in 1850; 604,215 in 1860; 818,759 in 1870; 1,591,749 in 1880; 2,235,523 in 1890; and 3,048,710 in 1900. Capital, Austin.

Government.—The following were the officers of the State for the year: Governor, Joseph D. Sayers; Lieutenant Governor, J. S. Browning; Secretary of State, D. H. Hardy; Treasurer, J. W. Robbins; Comptroller, R. W. Finley; Superintendent of Public Instruction, J. S. Kendall; Commissioner of Agriculture, Jefferson Johnson; Adjutant General, Thomas Scurry; Commissioner of the General Land Office, Charles Rogan; Attorney-General, T. S. Smith; Chief Justice of the Supreme Court, Reuben R. Gaines; Associate Justices, Thomas J. Brown and F. A. Williams; Clerk, Charles S. Morse—all Democrats.

Population.—The increase of more than 36 per cent. for the decade advanced the lead of Texas among the Southern States in population. In the 3,000,000 class her only companion is Missouri. Texas cities of more than 25,000 inhabitants show these comparisons: San Antonio—1890, 37,673; in 1900, 53,321. Dallas—1890, 38,067; in 1900, 42,638. Galveston—1890, 29,084; in 1900, 37,789. Fort Worth—1890, 23,076; in 1900, 26,688. Austin increased from 14,575 in 1890 to 22,253 in 1900.

Finances.—The balance in the treasury to the credit of general revenue at the beginning of the fiscal year, Sept. 1, 1899, was \$1,092,807.94; the receipts during the year ending Aug. 31, 1900, were \$2,859,967.60; making the total receipts, including balance, \$3,952,775.54. There was disbursed during the year \$2,733,781.60; transfers adjusting accounts amounted to \$59,406.40; leaving a balance on hand Aug. 31, 1900, of \$1,159,587.54. To the credit of the available school fund there was a balance Aug. 31, 1899, of \$16,574.76; the receipts during the year were \$3,318,276.23; total receipts, including balance, \$3,334,850.99; disbursed during the year, \$3,081,471.31; leaving a balance on hand Aug. 31, 1900, of \$253,379.68. The cash balance of the permanent school fund Aug. 31, 1899, was \$1,973,341.80; cash received during the year,

\$1,350,507.14; total receipts of cash, including balance, \$3,323,848.94; disbursed during the year, \$2,014,497.34; leaving a cash balance Aug. 31, 1900, of \$1,309,351.60. Bonds on hand to the credit of this fund Aug. 31, 1899, amounted to \$6,447,247.05; bonds purchased during the year, \$1,989,839.05; total, \$8,437,086.10; bonds redeemed during the year, \$643,564.95; leaving a balance of bonds on hand Aug. 31, 1900, of \$7,793,521.15. The amount of occupation taxes collected was \$918,982.48, an increase over the previous year of \$1,984.95. The value of assessed property for 1900 was \$946,320,258, an increase over 1899 of \$23,393,027. There was an increase in value of lands of \$6,106,902; of town and city lots, \$975,042; of horses and mules, \$2,160,587; of cattle, \$5,546,422; of goods and merchandise, \$3,637,388; money in banks, \$1,704,423.

Education.—The biennial report of the State Superintendent of Public Instruction shows the school population in 1900 to have been 706,546. The State apportionment was \$3,002,820.50. The number of teachers employed during the year was estimated at 16,000, a gain of 1,000 over 1899. A statement of the permanent school fund, based on the latest reports of the State Treasurer and the Commissioner of the General Land Office, exhibits these resources: State bonds, \$2,183,100; county bonds, \$3,915,556.60; railroad bonds, \$1,603,317; municipal bonds, \$91,547.55; land notes, \$13,101,330.78; cash on hand, \$1,309,351.60; estimated value of lands leased and unsold, \$20,613,527; total, \$42,817,780.53.

The report says that since 1870 Texas schools have received from the Peabody fund from \$1,000 to more than \$15,000 annually.

The attendance in all departments at the State University for 1899-1900 was 1,041, showing a marked increase, especially in the academic department. Besides localities outside of the State, more than 100 counties of Texas were represented in the enrollment. There are nearly 100 schools in the State in full affiliation with the university, and its continuous and rapid growth seems assured. The medical department in May conferred 41 diplomas, and the graduates in June numbered 116, making 157 in all—the largest number in the history of the university.

The Agricultural and Mechanical College graduated a class of 27. In their biennial report the Board of Directors of the college say that its growth in recent years has exceeded all expectations, and that with adequate appropriations there is practically no limit to its development.

At the Sam Houston Normal Institute the total enrollment for 1899-1900 was 493, representing 130 counties. The graduating class of 1900 numbered 98.

Charities and Corrections.—The number of pupils enrolled at the Deaf and Dumb Asylum Nov. 1, 1900, was 346, against 245 the year previous. In 1900 the various industries were taught to 129 pupils.

The 1900 enrollment at the Institute for Deaf, Dumb, and Blind Colored Youths embraced 20 blind boys, 20 blind girls, 26 deaf boys, and 18 deaf girls, a total of 84.

At the Texas Institution for the Blind, the number enrolled Oct. 31 was 177; number of totally blind, 70. There were 40 boys in the industrial department.

The number of patients in the Southwestern Insane Asylum, Nov. 1, was 704, an increase of 230 during the year. In his report for 1900 the superintendent calls for a change in the lunacy laws so that insane persons can be committed to State institutions without a public trial according

to criminal methods, but upon a certificate of medical men submitted to the county judge.

At the State Lunatic Asylum the number of patients, Oct. 31, was 734, of whom 399 were men and 335 women.

The annual report of the State Orphans' Home shows that there were 12 graduates in 1900, all in honorable employment, for which they were well equipped.

According to the biennial report of the Superintendent of Texas State penitentiaries, the net decrease of prison population from Nov. 1, 1898, to Oct. 31, 1900, was 365; total number of convicts on hand at the latter date, 4,109; percentage of whites, 35.5; negroes, 53; Mexicans, 11.5; pardons for the two years, 350; escapes, 189; recaptures, 78; deaths, 269.

Lawlessness.—At Port Arthur, Feb. 11, a man who had been tried and acquitted of the charge of murder was hanged by a mob, and after an inquest was given a pauper's burial. The grand jury sternly denounced the mob.

The police station at El Paso was attacked, Feb. 17, by an armed mob of negro soldiers from Fort Bliss, in an effort to release two soldiers confined there. One police officer and one of the attacking party were shot and killed.

At Austin, Oct. 15, a large mob of State University students attempted to take possession of the Grand Opera House during a performance. According to the Galveston News, repeated assaults were made by the mob, and several valuable pictures in the lobby of the building were demolished, while for a time the whole police force of the city were unable to quell the rioters.

A fight among several men, one of them a sheriff, occurred at Anderson, Nov. 7, in which two were killed and two wounded, one of the wounded being the sheriff, who was carried into the jail, which was afterward fired on from the courthouse.

Three negroes charged with murder, and said to have confessed, were taken from the jail at Jefferson, Nov. 14, by a mob, who hanged them from a railroad trestle near the town.

Eight men convicted of the Humphries lynching of May, 1899, were taken to the Rusk Penitentiary, Aug. 22, 1900. Three of the lynchings who turned State's evidence were liberated.

A Storm at Galveston.—One of the worst calamities in the history of this country visited Galveston and some parts of the mainland Sept. 8, when a hurricane which swept southern Texas spent its greatest fury upon the "Island City" and adjacent districts. The storm was attended by a huge inundation. At Galveston alone thousands of buildings and millions of dollars' worth of property were destroyed in a few hours. Here, also, the number of lives lost, although never fully ascertained, reached several thousand, to which were added hundreds more in other sections of the storm area. For scenes of horror and deeds of shame—such as pillage and robbery of the dead—nobly offset by acts of heroism and self-sacrifice, the catastrophe will be long remembered. The property loss in Galveston is estimated at more than \$17,000,000, including more than \$3,000,000 lost by the United States Government. More than 4,000 residences were destroyed. The destruction of business buildings and stock, wharfs, shipping, railroad and telegraph property, etc., was proportionately large. More than 30 miles along the shore, above and below Galveston, the country was flooded for several miles inland, and the losses in life and property were relatively as great as those in the city. In October, on incomplete returns, the Department of Agriculture at Washington estimated the agricultural losses, exclusive of

buildings, machinery, etc., at \$5,000,000. Thousands of the coast people were left homeless, but they quickly recovered, with comparatively little assistance, from the first shock of the disaster. In courage and energy the citizens of Galveston also proved themselves equal to their terrible situation, and by the end of the year the restoration of their city was well advanced. At the close of 1900 the relief received by Galveston from all sources amounted to \$1,594,000.

In spite of the great storm and of a short cotton crop in southern Texas, the movement of cotton through the port of Galveston for the calendar year of 1900 was larger than that of 1899, and the city is expected to remain the chief primary cotton port of the world. According to official custom-house figures, the cotton export of 1899 was 1,528,232 bales, valued at \$52,786,731; that of 1900, 1,535,202 bales, valued at \$73,333,364. Of cotton-seed cake and meal and cotton-seed oil, the Galveston exports for 1900 together reached the value of \$6,703,912. At the end of 1900 the storage-elevator capacity of the city was 3,000,000 bushels, and during a season the port can handle 70,000,000 bushels of grain. Diversification of crops has greatly developed Galveston as a general market and shipping point.

Floods.—The Brazos flood of 1899, which caused heavy damage, was followed by great enrichment of the soil along the river bottoms through the deposit of deep sediment with highly fertile qualities, in consequence of which new land was broken and the area of cultivation in many places was largely increased. The spring floods of 1900 on many of the streams caused damage to lands and other property. Those on the Colorado were of extreme violence, and at Austin, April 7, the magnificent dam, which cost \$1,000,000, was swept away with serious loss of life. (For description of this dam, see *Annual Cyclopædia* for 1892, page 252, and for 1893, page 715.) The inundation below Austin was very destructive. There was a sudden flood in the creek at Coleman, July 16, whereby buildings and camps were washed away and lives were lost.

Brazos River Survey.—The end of 1900 brought the completion of the Government survey of Brazos river from Waco to its mouth, 428 miles. The engineers reported that improvement of the river so as to make it navigable at all seasons was only a question of money, the most feasible plan being the construction of locks and dams. Stationary dams were considered unsuitable, on account of the periodical overflows. The fall of the Brazos from Waco to its mouth is about 358 feet.

Independence Monuments.—A monument "to the heroes of the Texas revolution of 1836" was unveiled at Galveston, April 21. It was the gift of the late Henry Rosenberg to the people of Texas, and represents all the prominent features of the revolution. Its full height is 74 feet, and the base is 34 feet square. The bronze statuary, which was cast in Rome, is supported by a structure of the finest Concord granite.

On the same day, to commemorate the same events, a monument erected by the school children of the State was unveiled on the site of old Washington, the town where independence was proclaimed, which was three times the capital of the republic of Texas. The height of this monument is 13 feet and 9 inches, and the material is gray Texas granite.

Legislative Session.—The Legislature held a special session from Jan. 23 to Feb. 21. The Governor's first message dealt solely with the tax bill framed and reported by a commission created at the regular session in 1899. The commission was

directed "to frame and report a bill or bills designed and calculated to secure an exhaustive and equitable assessment of all taxes upon every species of property in this State, real, personal, and mixed, tangible and intangible, and whether belonging to natural or artificial, to residents or nonresidents, to the end that no character of property, assets, holdings, or valuable interests shall escape the due, just, and equal burdens of taxation; and to provide for and enforce the prompt, effective, and complete collection of all taxes imposed."

The Legislature at this session not only failed to reach any final action upon the bill, but was unable even to consider all its provisions. In a final message the Governor gave his reasons for not calling another special session for further consideration of the bill. Among measures of general importance passed at this session was one reducing the rate of taxation so as to save to the people annually about \$300,000 in cost of government; another, settling the differences between the permanent school fund and the State regarding the division of the public domain, whereby all the remaining public domain, amounting to 4,456,000 acres and \$17,000 in cash, were appropriated to the permanent school fund; and a law providing a form of government for the public schools in place of a statute declared unconstitutional by the Supreme Court.

Political.—Two Republican State conventions were held in Waco, March 7, and two sets of delegates to the national convention and two sets of candidates for presidential electors at large were elected. These rival gatherings were the outcome of factional differences.

The first State convention of the People's party was held in Fort Worth, May 4. Resolutions were adopted recognizing the national convention called to meet at Cincinnati, May 9, as the only authorized national convention of the party, and opposing fusion with either of the old parties, but favoring a union of all reformers under the banner of the People's party, with one leader and no surrender of the Omaha platform. All delegates from the State to the Cincinnati convention were instructed to vote for none but a straight Populist as candidate for President or Vice-President. Resolutions were adopted denouncing the British war on the Boers, and expressing sympathy for the South African republics.

The first Democratic State convention met in Austin, June 20. The platform instructed the delegates to the national convention to vote for the nomination of William J. Bryan for President; for the readoption of the Chicago platform, with amendments opposing trusts and combinations in restraint of trade, affirming that all governments derive their just powers from the consent of the governed, opposing all efforts to establish or maintain colonial possessions, renewing allegiance to the Monroe doctrine, demanding speedy fulfillment of our pledge to Cuba, and the same treatment for the people of the Philippines that was promised to the Cubans; for a declaration in favor of a constitutional amendment providing for election of United States Senators by direct vote of the people; for a resolution expressing the cordial sympathy of the United States with the South African republics; and for a declaration in favor of the construction, owning, and operating of the Nicaragua Canal by the United States.

The Social-Democratic State Convention was held in Dallas, July 4, and nominated the following State ticket: For Governor, L. L. Rhoades; Lieutenant Governor, G. H. Shoap; Comptroller, W. A. Mitchell; Treasurer, W. E. Marshall; Com-

missioner of the General Land Office, C. A. Otterbien; Railroad Commissioner, G. B. Harris. The selection of candidates for Attorney-General and Superintendent of Public Instruction was left to the State Executive Committee. A resolution was adopted severing all relations with the national organization because of internal dissensions. The platform approved international socialism and reaffirmed the platform of the Indianapolis convention; indorsed the nomination of Eugene V. Debs and Job Harriman for President and Vice-President; demanded a law prohibiting the employment of children under sixteen years of age in factories, mines, or at any employment that precludes the fullest opportunity for acquiring an education, and which shall provide for assistance, when necessary, from the public funds to furnish food, clothing, books, and supplies without inflicting the stigma of pauperism; a statute prohibiting the employment of women and children in all unhealthful occupations; a statute for rigid inspection of factories, mines, and workshops with reference to the safety and health of the workers; and that a legal workday shall not exceed eight hours. The platform favored the initiative and referendum.

The second State convention of the People's party assembled in Waco, July 24. Presidential electors at large were nominated, and were instructed to vote for Barker and Donnelly. The following State ticket was put in nomination: For Governor, J. C. Kearby; Lieutenant Governor, Clarence Nugent; Attorney-General, J. G. Nix; Commissioner of the General Land Office, S. C. Granbury; Treasurer, P. P. Clark; Comptroller, J. S. League; Superintendent of Public Instruction, Reddin Andrews.

The State Executive Committee was authorized to nominate candidates for judgeships of the higher courts.

The platform demanded the initiative and referendum; abolition of the Railroad Commission; State ownership and operation of transportation so far as necessary to regulate freight rates; construction, ownership, and operation of the Nicaragua Canal by the United States; an efficient system of public schools throughout the State, a change in the scholastic age making it from six to twenty-one years, and free books for the schools, to be furnished by the State; reforms in the judicial system of Texas; legislation to secure equitable taxation and to correct abuses of the fee system. The gubernatorial nomination was declined by J. C. Kearby, and T. J. McMinn was made the party's candidate for Governor.

At the second Democratic State convention, which met at Waco, Aug. 8, these nominations were made for State officers: For Governor, Joseph D. Sayers; Lieutenant Governor, J. S. Browning; Attorney-General, Thomas S. Smith; Comptroller, R. M. Love; Land Commissioner, Charles Rogan; Treasurer, John W. Robbins; Railroad Commissioner, L. J. Storey; Superintendent of Public Instruction, J. S. Kendall; Associate Justice of the Supreme Court, F. A. Williams; Justice of the Court of Criminal Appeals, John N. Henderson.

The platform, in addition to indorsing the State administration and the action of the national convention at Kansas City, including its nominations for President and Vice-President, contained strong declarations in favor of the party policies for the maintenance of good government in Texas. It approved reasonable efforts to equalize taxation and the just taxing of corporations upon their gross receipts; impartial enforcement of the State laws, without discrimination against the weak or in favor of the strong; upholding of the railway commission law, of the railway stock and bond

law, and of the alien land law and the corporation land law; submission by the next Legislature for the action of the people of constitutional amendments to prevent insolvent corporations from doing business in the State, to prevent the use of corporate funds in politics, and to suppress the system of free railroad passes; improvement of the public school system; suppression of mobocracy and whitecapism; and the amendment of the primary election law so that every State primary election shall be held in all the counties on the same day in the case of each party, in order to spare the people the annoyance and expense of perpetual political campaigns.

The Prohibitionists, at their State convention in Dallas, Sept. 14, chose candidates for presidential electors at large, nominated W. K. Homan for Governor and H. G. Damon for Lieutenant Governor, and adopted a platform declaring everlasting enmity to the liquor traffic, demanding prohibition of the manufacture, importation, or sale of alcohol in every form, and inviting all patriotic citizens to join with the Prohibition party at the polls.

The second State conventions of the divided Republican party were both held in San Antonio, Sept. 18 and 19 respectively, and rival State tickets were nominated. The factional troubles were subsequently referred to the Republican National Committee, with the result that the transactions of all the conventions of the two factions were annulled, and new nominations for all offices were made, representing the party in the State at large. Under this adjustment the Republican State ticket was revised and announced as follows: For Governor, R. E. Hannay; Lieutenant Governor, John B. Schmitz; Attorney-General, Lock McDaniel; Treasurer, C. K. McDowell; Comptroller, Joseph Tweedy; Commissioner of the General Land Office, C. G. Brewster; Superintendent of Public Instruction, David J. Abner, Jr.; Railroad Commissioner, Charles B. Peck; Chief Justice of the Supreme Court, J. M. McCormick; Associate Justice of the Supreme Court, F. B. Stanley; Associate Justice of the Court of Criminal Appeals, Charles A. Boynton.

At the election, Nov. 6, the Democrats were successful with their State and electoral tickets. The presidential vote of the State was divided as follows: Bryan, 267,432; McKinley, 130,641; Barker, 20,981; Woolley, 2,644; Debs, 1,846; Malloney, 162.

TRANSVAAL, or South African Republic, a republic in South Africa, founded by Boers who left Cape Colony and established an independent government in Natal in 1836, and migrated into the interior when that country was annexed by Great Britain. The Transvaal Republic was recognized as independent by Great Britain in 1852. In 1877 it was occupied by British troops and annexed to British dominions. In 1880 the Boers expelled the British garrisons, and self-government was restored by the treaty of peace signed on March 21, 1881, the control of foreign relations being reserved to Great Britain as suzerain power. On Feb. 27, 1884, the relations were modified by a new convention, in which Great Britain retained the right to veto within six months of its signature any treaty with a foreign power or a native chief. In October, 1899, war broke out again between the Transvaal and Great Britain; in May, 1900, the capital was occupied by British troops; on Sept. 1, 1900, the Republic was declared to be annexed to British dominions under the name of the Transvaal Colony; and on Oct. 25 the annexation was formally proclaimed at Pretoria. The Boers did not acknowledge the annexation, and were still in military occupation of a good part

of the country. The President of the Republic, S. J. Paulus Kruger, re-elected for the fourth term on May 12, 1898, went to Europe in November, 1900, to seek the intervention of other powers. Gen. Pieter J. Joubert, who died on March 27, 1900, was succeeded as Vice-President by Schalk Burger, and as Commandant General by Louis Botha. The other members of the Executive Council in the beginning of 1900 were F. W. Reitz, State Secretary; Commandant Pieter A. Cronje, Superintendent of Natives; J. H. M. Kock, Keeper of Minutes; and J. M. A. Wolmarans and S. W. Burger. A defensive alliance was concluded with the Orange Free State in 1896, after a raid of Dr. Jameson at the head of Bechuanaland border police in connection with an attempted revolution in Johannesburg, for which Cecil Rhodes, then Prime Minister of Cape Colony, and others interested in gold mines, furnished arms and money with the object of raising the British flag.

Area and Population.—The area of the Transvaal is 119,139 square miles. In an imperfect census taken in 1896 the white population enumerated was 245,397, comprising 137,947 males and 107,450 females. In 1898 it was estimated at 288,750, comprising 166,400 males and 122,350 females. The native population paying taxes was 402,502, and the total native population in 1898 was estimated at 748,759, comprising 148,155 men, 183,280 women, and 417,324 children. The population of Pretoria in 1896 was about 8,000 and in 1898 10,000. Johannesburg, the mining center, had 102,704 inhabitants at the census of July 15, 1896, of whom 51,225 were whites. The state schools, 429 in number, had 11,552 pupils in 1897, besides 555 in the model school, the gymnasium, and the girls' high school in Pretoria. The Government spent £140,286 for education, and many of the English residents in the Witwatersrand gold fields supported their own schools, in which their language was used exclusively, whereas in the Government schools of the district instruction was given in both Dutch and English.

Finances.—The revenue in 1893 was £1,702,684; in 1894, £2,247,728; in 1895, £3,539,955; in 1896, £4,807,513; in 1897, £4,480,218; in 1898, £3,983,560; expenditure in 1893, £1,302,054; in 1894, £1,734,728; in 1895, £2,679,095; in 1896, £4,071,393; in 1897, £4,394,066; in 1898, £3,971,473. Of the revenue in 1898, customs duties yielded £1,066,985; royalties, £125,439; direct taxes, £174,610; mining licenses, £626,025; stamps, £285,383; fines, £90,713; interest, £254,091; posts and telegraphs, £206,332; South African Railroad, £668,951; sale of explosives, £223,342; other sources, £260,779. Of the expenditures in 1898, salaries absorbed £1,080,382; cost of collection, £22,962; justice and police, £141,307; public instruction, £202,831; public health, £88,952; posts and telegraphs, £145,202; War Department, £357,225; public works, £801,332; public debt, £156,657; purchases, £289,271; expenses of Swaziland, £148,961; other expenses, £446,391. The Department of Mining Commissions in Johannesburg collected £849,226, and cost £85,005, making the net receipts £764,221. The debt of the Republic consisted on Dec. 31, 1898, of £136,644 due to the British Government for the occupation in 1877, the 5-per-cent. Rothschild loan of £2,500,000, and a railroad debt of £23,750; total, £2,660,394.

The Army.—Neither the South African Republic nor the Orange Free State has maintained a standing military force except a corps of artillery. The state artillery of the Transvaal in 1899 consisted of 29 officers, 83 noncommissioned officers, and 289 men, and there was a telegraph corps of

1 officer and 15 men. The Orange Free State had 150 artillerymen in active service and a reserve of 550. After the Jameson raid the Transvaal Government gave large orders in Europe for Krupp and Creusot guns, Maxims, Nordenfelts, and Mauser rifles and smokeless powder, to rearm the burghers. A powder factory was established, and European experts were engaged for the manufacture and repairing of arms. The number of large guns belonging to the South African Republic when the war began in October, 1899, was reported by the British Intelligence Department to be 16 Creusot of 15-centimetre caliber, 21 of 37-millimetre and 9 of 75-millimetre caliber, and 15 howitzers. More pompons and other light guns were brought in before and after war was declared, but additional field guns that were ordered could not be delivered. The Orange Free State had 12 modern 75-millimetre guns and 18 guns of old construction. The capture of 19 British guns in the early battles of the war increased the Boer artillery, so far as it was known, to about 110 guns. The laws of the Transvaal require every male citizen between the ages of sixteen and sixty to join his district commando at the summons of the field cornet and fight for the defense of the Republic until the commando is disbanded. The natives can be commandeered to serve as drivers and runners, and in other noncombatant capacities. The laws of the Orange Free State are substantially the same. The estimate of the fighting strength of the Boer republics made for the British Ministry of War at the outbreak of hostilities was 29,279 burghers in the South African Republic and 22,314 in the Orange Free State; total, 51,593. The Cape Colony and Natal Dutch likely to volunteer in the Boer service were estimated at 4,000, the number of foreigners at the same figure, and the number of police was 1,500, making with the artillery a total of about 62,000.

Commerce and Production.—Sheep, cattle, horses, ostriches, and goats are raised by the Transvaal Boers on enormous farms. Agriculture is so little practiced that wheat and flour are imported. Mealies are grown in the east, chiefly by natives, and are distilled into whisky as well as used for food. The area under regular tillage in the Republic is estimated at 50,000 acres. The mercantile community is composed of English, Germans, and other foreigners. The gold mines, belonging to companies whose stock is held largely in Paris, London, and Berlin, but much of it, too, by the original promoters who have been identified with Johannesburg and the agitation against the Boer Government, produce low-grade ore which can be worked very profitably by modern chemical processes, but only after the outlay of large capital. The miners are natives from all over South Africa engaged on time contracts, the foremen and skilled laborers British and other Europeans and Australians, the technologists and managers mostly Americans and Englishmen. The trading community and those who live indirectly on the mining industry have come from all quarters of the world. The deep-level mining lands which have not yet been opened belong to the Government, as do also the extensive auriferous lands in the Barberton district. In ten years from the time when the mines of the Witwatersrand became productive the Transvaal rose to be the chief gold-producing country in the world. The value of the output in 1898 was £16,044,135, compared with £11,476,260 in 1897 and £8,603,821 in 1896. In eight months of 1899, at the end of which exports were stopped by war, the product was £12,620,000 in value. The number of whites employed by 73 companies in 1898 was 9,476, and of natives 67,797; another re-

turn gives the total number of persons employed by 86 companies on Dec. 31, 1898, as 88,627. The value of diamonds found in the Transvaal in 1898 was £43,730. The quantity of coal raised was 1,907,808 tons, valued at £668,346.

The total value of imports in 1898 was £10,032,893, having declined from £13,563,827 in 1897 and £14,088,130 in 1896. Of the imports in 1898 the value of £6,332,174 came direct from Europe, £1,203,239 from Natal, £1,158,972 from Cape Colony, £920,289 from the Orange Free State, £536,722 from Lourenço Marques, and £481,497 from other countries. A large proportion of the mining machinery, timber, foodstuffs, hardware, and other articles were the produce or manufacture of the United States. The chief imports were machinery, of the value of £1,462,323; live animals, £1,091,038; textile fabrics and clothing, £926,661; haberdashery, £301,266; woolen goods, £165,876; hardware, £577,049; railroad materials, £266,203; vehicles, £181,238; leather goods, £346,008; flour and grain, £356,507; maize, £200,694; spirits, £262,924; sugar, £198,449; timber, £47,460; furniture, £179,512; Government stores, £129,646.

Railroads and Telegraphs.—There were 774 miles of completed railroads in 1898, connecting Pretoria and Johannesburg with railroads running from Lourenço Marques, Durban, and Cape Town and Port Elizabeth, and having an extension northward from Pretoria as far as Pietersburg and a westward branch to Klerksdorp. There were 270 miles more partly built and 250 miles authorized. The length of telegraph lines within the borders of the Transvaal was 2,200 miles, with 5,650 miles of wire. The number of messages sent in 1898 was 1,674,117.

British Advance on Bloemfontein.—When Field-Marshal Lord Roberts arrived to take command in South Africa on Jan. 10, 1900, the garrisons in Ladysmith, Kimberley, and Mafeking were closely invested by the Boers, who not only held the relieving forces in check, but successfully invaded Cape Colony. Yet 6 divisions had been sent from England. A seventh was on its way, exhausting the reserves, and volunteer forces had been sent from the colonies and raised in South Africa, which were to be supplemented by yeomanry, militia, and volunteers raised in Great Britain. Lord Roberts's plan was to raise the siege of Kimberley by invading the Orange Free State. It not only had that effect, but it raised the siege of Ladysmith also, and compelled the withdrawal of the invading commandos in the northern parts of Cape Colony. When the columns of Lord Roberts struck out into the sandy region of the Orange Free State between Kimberley and Bloemfontein Gen. Piet Cronje was taken by surprise, because the British had not left the railroads before this. He sent a part of his force round by the north, out of the possible reach of the British, and with the rest he endeavored to strike across in front of the British column so as to be able to contest its advance upon Pretoria. Lord Kitchener, who directed the operations, stopped the movement on Kimberley and ordered his whole force to wheel to the right and overtake Cronje. By posting his rear guards well the Boer leader managed to repel the attacks of the mounted infantry, but the cavalry by a forced march from Kimberley succeeded in seizing the Koodoosrand drift on Feb. 17, less than an hour before his arrival, obliging him to go back three miles to Wolveskraal to cross the Modder. There the divisions of Gen. Kelly-Kenny and Gen. Colville, under Lord Kitchener's orders, made a direct attack on the following morning, and sustained a loss of 1,100 men. The tactics employed, which

were much criticised, had the effect of retarding Gen. Cronje's retreat so as to enable Gen. French's half-exhausted cavalry to pass round and inclose him on the east. The position evacuated by Cronje extended from Magersfontein nearly to the Klip drift. That and the position on the Tugela, bestriding another of the railroads by which the British would have to bring their supplies, and that at Stormberg, threatening the railroad that runs from Cape Town to Bloemfontein and Pretoria, were the strongest positions that the Boers could have chosen to defend their country against invasion. All three had to be given up when Lord Roberts decided to invade the Orange Free State independently of the railroads, moving up forces from Cape Colony to co-operate in establishing railroad communication afterward.

The invasion of the Orange Free State by 23,000 infantry and 11,000 mounted men, with 98 guns and a transport of 700 wagons drawn by 9,000 mules and oxen, began on Feb. 12, 1900. At Paardeberg Cronje made a heroic stand when headed off by the British cavalry, and on Feb. 27 surrendered with 4,080 men. A large part of his force during the siege of ten days had escaped by evading the investing line, taking some of the guns and a good part of the stores. The invasion of the Orange Free State by the British produced an immediate and complete change in the military situation.

The Boers after Paardeberg abandoned the offensive and retreated from their positions at Stormberg and Colesburg in Cape Colony, and brought away their guns from their line investing Ladysmith and the works on the Tugela, against which Gen. Buller had repeatedly hurled his army with disaster. The Free Staters could not be kept in Natal and Cape Colony when their homesteads were at the mercy of the invader. When Lord Roberts set out from Jacobsdal, Gen. Buller moved simultaneously round the Boers' left flank, captured Monte Cristo hill on Feb. 18, on the following day occupied Hlangwane, brought his troops across the Tugela, advanced on Grobler's Kloof, made an unsuccessful attack on Railway hill on Feb. 23, and had to retreat over the Tugela, but made a fresh passage on Feb. 26, took Pieter's hill on Feb. 27, the day of Cronje's surrender, and on the day following relieved Ladysmith. The Boer forces, which were commanded by Gen. Louis Botha, while they gave the British some of the severest fighting they had yet gone through, were all the time melting away, and they made their last gallant stand only for the purpose of covering the removal to the railroad of their guns and ammunition and the accumulated stores of all kinds. Their evacuation of Hlangwane was without orders, and was due to the feverish anxiety of the Free State Boers to return to their homes. When Gen. Buller had driven a wedge into their position and the departure of Free State troops had left their long line on the Tugela very thinly manned, retreat became inevitable. With 20,000 men they had held 10,000 British troops in Ladysmith, and at the same time resisted the advance of 30,000 men from the south.

Two of the Boer commandos in Cape Colony hastened first to the relief of Gen. Cronje when he was encircled by the British at Paardeberg, leaving the western district that they held to be reoccupied by the British. Gen. Brabant with his colonial troopers entered Dordrecht on Feb. 18, and on Feb. 25 occupied Jamestown. The Boers in front of Arundel made an attack on Feb. 20, but it was only preparatory to withdrawal. On Feb. 25 Col. Clements chased them back to Kuilfontein, on Feb. 27 he reoccupied Rensberg, from which he

had been driven a fortnight before, and on Feb. 28 he entered Colesberg. On March 4 Brabant captured the Boer position on Labuschagne Nek. At Stormberg the Boers held their position strongly yet on Feb. 24, when they repelled a British attack, but they retired after the surrender of Cronje, and on March 5 Gen. Gatacre occupied the natural fortress which had stopped his first attempted advance into the Free State. The retirement of the Boers from Cape Colony was accomplished in perfect order with a stubborn rear-guard defense.

Lord Roberts in his march to Bloemfontein was threatened on the left flank by the Boer forces escaped from Cronje's army and summoned from Cape Colony and Natal, which were rallied by the presidents of both republics. The British had captured a large train of provisions belonging to the Boers when pursuing Cronje, and now were crippled by the loss of a large part of their own convoy, which the Boers captured on the Riet river at Waterval. While the British rested at Osonfontein the Boers entrenched themselves on both sides of the Modder river at Poplar Grove, Gen. Christian de Wet in command. This position, 15 miles long, the British succeeded in turning on March 10, and after a fight with the British cavalry and horse artillery, whose jaded horses were almost used up in the long circuitous march, the Boers retreated in good order, having inflicted a loss of 50 on the attacking force, which made three assaults on an elevated position from which Gen. Delarey defended the Boer left flank. At Driefontein the central column of the three into which Lord Roberts divided his army found the Boers holding a double line of kopjes crossing the road. The third column, advancing along the Modder, turned its course southward to co-operate in the capture of the Boer position, which was vigorously defended till dark by the men who had come from Colesberg, joined by others from Ladysmith, Gen. Delarey commanding. On March 12 Gen. French with the British vanguard occupied hills commanding Bloemfontein. The Boers made no further attempt to defend the Free State capital. They were concentrating on a strategic line north of it, and the delay that Gen. de Wet and Gen. Delarey had caused gave time for the forces to assemble and reorganize. For the British their resistance had serious consequences. Fatiguing marches to carry out rapid flanking operations exhausted and disabled horses, so that the British were practically without cavalry mounts or transport. On March 13 Lord Roberts took possession of Bloemfontein. The evening before President Steyn and the other officers of the Free State Government, without replying to Lord Roberts's demand for surrender within twenty-four hours, departed with the archives, except two pro-British officials, who remained to hand over to Lord Roberts the keys of the public buildings.

Annexation of the Orange Free State.—After the occupation of Bloemfontein Lord Roberts endeavored to clear the country in the south and restore railroad communications with Cape Colony. The cavalry of Gen. French and Gen. Pole-Carew, co-operating with Gen. Brabant, endeavored to cover the line extending from Bloemfontein and Ladybrand, on the Basutoland border. Gen. Louis Botha, in command of the Boer forces in the southeast of the Free State, skillfully evaded the strong mounted force sent eastward to intercept him, passing up the Leeuw river valley the day before Gen. French completed the cordon that was intended to hem in the Boer column, which was hampered on its long march by an enormous train. The British were not strong enough to occupy the part of the Free State south of Bloem-

fontein. Lord Roberts issued a proclamation requiring the burghers to deliver up their arms under penalty of being punished and having their property confiscated. Mobile detachments passed through the districts from which the Boer forces had been withdrawn, and many of the Free State burghers gave up arms. Even those apparently loyal to British rule could not be trusted. A long pause at Bloemfontein was necessary to accumulate supplies for the advance upon the new positions of the Boers between Bloemfontein and the Vaal river. Horses had to be got for the cavalry and artillery and transport animals. The cold season had begun, yet the soldiers had no warm clothing. Before the army reached Bloemfontein it was reduced to quarter rations. Supplies were found there, but before long the question of food became serious in the absence of safe, railroad communications.

The Boers, taking advantage of the crippled condition of the British army, established their outposts within 20 miles of Bloemfontein, and made excursions into the southern country to keep in touch with the burghers who still had arms and ammunition. The eighth division of troops sent from England debarked at Cape Town, making the total British force in South Africa more than 200,000 men, and it was followed by a ninth division.

Commandant Olivier, who retreated from Stormberg with 15 guns and a great convoy, left Rouxville just before Gen. Brabant arrived there to intercept him. While he moved northward along the Basutoland border, a cavalry brigade marched from Bloemfontein to Thaba Nchu to cut him off, and a detachment entered Ladybrand, but was driven out by the Boers. The 6,000 men of Commandant Olivier, having gained the Platberg, commanded Ladybrand and could defy the British, having a safe line of retreat to the north. On March 25 Gen. French attempted to dislodge the Boers who were entrenched, 2,000 strong, near Karee Siding, and lost 180 men in an infantry attack, but by stretching out his line he compelled them to abandon their position for fear of being surrounded. This was the first move in the northward advance. Before the British could make a new advance much remained to be done to clear their rear and render secure the position they then held. The Boers had become very active again, and threatened to retake Bloemfontein. On March 30 a mounted force commanded by Col. Broadwood, which held Thaba Nchu, finding itself threatened by the Boers on the north and east, retired in the night toward Bloemfontein, pursued by the Boers, who opened fire from three sides in the morning. The baggage and two horse artillery batteries, which were sent on while the mounted troops remained to act as a rear guard, marched into an ambush prepared for them at Koornspruit, where 150 men were killed and 200 taken prisoners, and 7 guns and all the baggage fell into the hands of the Boers. One of the batteries entered a drift, and the Boers quietly secured the surrender of the officers and men as they came along without a shot being fired and without those in the rear being aware that the guns and baggage train ahead had been given up to the enemy. The men of the other battery fought bravely under a cross fire and brought away some of the guns. An infantry division and two cavalry brigades were sent out from Bloemfontein, but Gen. Colville, who commanded the re-enforcements, returned after an arduous and futile march, leaving the enemy in possession of the waterworks. The Boers moved round to the south of Bloemfontein after the withdrawal of the British, and on April

4 they captured at Reddersburg an entire detachment, consisting of 167 mounted men and 424 infantry, of whom 10 were killed and 36 wounded. These successes led hundreds who had surrendered to the British and returned to their farms to rejoin the active Boer forces. Gen. de Wet joined hands with Olivier's commando from Ladybrand at Wepener, and closely besieged the British force that was posted on the Basutoland frontier to keep the Kaffirs loyal. Here, as at Mafeking, the British had natives fighting with them. When relief from Bloemfontein approached the Boers withdrew. A large part of the British army was needed to garrison Bloemfontein on account of the known hostility of the Dutch citizens, who kept the Boer generals informed of all movements of the British and who had many weapons concealed. Lord Roberts deported the citizens whom he suspected. The blunders at Koornspruit and Reddersburg were humiliating to the British. The primary blunder of leaving detachments at Thaba Nchu and Wepener unconnected with the base raised a question as to the competency of the British commanders, and the retirement of two divisions under Gen. Colville's command, the infantry division, and Gen. French's cavalry, leaving the whole southern country open to the commandos of De Wet and Olivier, seemed to have turned the tide of war once more in favor of the Boers. The inability of British generals to cope with the Boer militia attracted the attention of the military men of all countries, and the publication of some dispatches in which the English commanders commented sarcastically on the careless manner in which their subordinates led their men into Boer traps brought on a discussion as to the advisability of reforming the whole military system of Great Britain, even to the extent of introducing compulsory service. The Boer military system was a national one in which every burgher was versed, in which the tactics were familiar to all, and the plan of every action was communicated to all the soldiers who took part. Every Boer was not only a fair marksman, but possessed a good eye for country and cover, and was able to judge whether a hill or a fold in the ground was defensible and offered facilities for attack or retreat. The art of digging trenches and erecting *schanzes*, or breastworks of stone, and of putting them in the position where they were effectually concealed from any advancing force, was a natural faculty of the burghers developed in their incessant warfare with the natives and their previous conflicts with the British. The mobility of their army, in which every man was mounted, not only enabled them to strike hard blows where they were not expected, but was of greater use in defense, permitting them to mass their whole strength at the points attacked, denuding every other point of their line, which they did with seeming recklessness. They could thus hold a line of fortifications with a tenth of the force that a European general would consider necessary, and impressed the English with the belief that they were ten times as strong as they actually were. The individual initiative allowed to every burgher and the knowledge that every burgher possessed of what was going on contrasted with the British method of concealing all intended movements not only from the men, but from the officers except the few who had to do with directing operations. As far as possible, the plan of an intended battle was communicated to the whole Boer army beforehand; and, knowing the general plan, every man had a clear idea of the right thing to do in the emergencies that arise in the separate parts of a battlefield. The Boers had no admiration for courageous

daring unless strategic necessity called for a sacrifice of life. Piet Cronje's wonderful rear-guard fight and the tenacity with which his men held out in their holes in the river bank to enable the main force to escape won the highest praises, but whenever an exposed position was incautiously occupied, no matter how valiantly it was defended, as Elandslaagte was by the Johannesburg commando, the Boer generals had no praise for the bravery of their men, only blame for their rashness. In holding on to a position as long as possible, and then retiring to one in the rear and defending that to the last, no troops ever displayed greater courage. They had not the courage, however, to take risks in following up an advantage, and had a chronic fear of being surrounded, as it was the plan of Lord Roberts with his superior forces invariably to surround them. The costliness of the frontal attacks of Lord Methuen on Magersfontein and of Sir Redvers Buller on the Tugela defenses determined him to avoid such tactics in the future, but Lord Kitchener, in attacking Gen. Cronje's retreating force at Drieputs on Feb. 16, departed from the rule, and suffered heavy loss in consequence. The Boer generals had no European advisers except for the handling of artillery, and the Boers themselves displayed resourcefulness in turning all sorts of guns to a useful purpose, whether they were field guns, naval guns, or guns of position. There were about 1,000 trained gunners under Col. Trichardt. The Boers had lost only 4 men killed and 25 wounded of their artillery force during the entire previous course of the war, and of their material only 1 Krupp quick-firing gun, 2 Nordenfelts, and 1 Maxim-Nordenfelt, while 2 howitzers were rendered useless. They took from the British 4 mountain guns at Nicholson's Nek, 10 15-pounders at Colenso, and 5 15-pounders and 2 Maxims at Koornspruit, otherwise known as Sannaspost, and all these they employed against their former owners. The Boers had ordered 20 batteries of Creusot guns, but could not get them delivered. The foreign volunteers fighting for the Boers, exclusive of the Uitlanders of the Rand, were 120 Russian scouts, 100 American scouts under Capt. Hassell, 150 Germans, 100 Irish, 100 Italians, 200 French, and 200 Dutch. The Uitlanders fighting on the Boer side numbered over 5,000, consisting of 300 in the Irish brigade, similar Dutch, French, Italian, and Scandinavian brigades, and about 500 Irish and Irish-Americans, a larger number of Dutch and of Germans, and smaller numbers of the other nationalities, including a few English, scattered among the Transvaal and Free State commandos. The total strength of the Boer forces in the field, including Boers, Afrikaners from the Cape and Natal, Uitlanders, and foreigners, hardly ever exceeded 35,000 at one time. After the death of Gen. Piet Joubert, who latterly was not able to direct active operations in the field, Lord Methuen, whose diminished division occupied Kimberley while Lord Roberts was driving the Boer army back upon Bloemfontein, sent out an expedition for the relief of Mafeking, where a British force under Col. Baden-Powell had been closely besieged for many months. Col. Keke-wich, the late commandant at Kimberley, conducted a second expedition through Griqualand, but in every case when the British were not present in force the inhabitants rose in arms. The march through a desert country, with enemies in both front and rear, could not be made from the south. Col. Plumer, who attempted to break the siege from the other direction, had an insufficient force, but was able to create a diversion by threatening Zeerust. Gen. Villebois-Mareuil, a French officer whose services were of great value to the

Boers, was surrounded with 68 foreign volunteers at Boshof by a force of British yeomanry, and was killed in the action. Lord Methuen's northern advance from the vicinity of Hoopstad was brought to a stop with daily losses.

The Boers had, while Lord Roberts remained inactive at Bloemfontein, about 34,000 men in the field, of whom 12,000 held the Biggarsberg line of defense in Natal, 12,000 were in the Free State north, east, and south of Pretoria, 5,000 were at Fourteen Streams, 5,000 were scattered along the northern and northwestern border, and 2,000 beleaguered Mafeking. There was a reserve of about 6,000 more, who were employed as frontier guards, on commissariat service, in the Rand police, and in permanent garrisons at various points. The losses had been 5,000 captured at Paardeberg and before, 1,000 killed, 3,000 wounded, of whom half were again in active service, and 1,000 disabled by illness. The English captives at Pretoria numbered 6,000. Gen. Louis Botha was on April 19 appointed commandant general of the Transvaal army, and Schalk Burger became Vice-President of the Republic. President Steyn and the other Free State officials established the capital of their republic at Kroonstad after they fled from Bloemfontein.

An advance of the British from the south, joined by cavalry and light artillery from Bloemfontein, drew off the Boer commandos that were roaming south and southeast of Bloemfontein, harassing the line of railroad communications, which up to this time could not be fully restored, and keeping alive the spirit of resistance in the Free State and the active sympathy of the Cape Dutch. The reinforcements of yeomanry and other troops from England and fresh horses and transport animals reached Bloemfontein before the movement was undertaken. Till then Lord Roberts was hampered by illness among his men and his beasts and by the transport difficulties for the immense food supplies over the railroad to Kimberley, and from there by a desert road. The Boers had a strong position near Dewetsdorp, which was occupied after some fighting by Gen. Chermiside's division from the south on April 25. The waterworks were retaken by Gen. Ian Hamilton. Gen. French endeavored to place himself across the line of retreat crossing the Modder at Valsbank, and this compelled the Boers to save themselves by abandoning the siege of Col. Dalgety's colonials at Wepener and to fall back from Dewetsdorp toward Ladybrand. Gen. Brabant, who was expected to relieve Wepener from the south, arrived after the Boers had disappeared. Gen. French caught up with the Boers' rear guard at Thaba Nchu on April 27. The retreat was conducted by Gen. Louis Botha. Gen. Grobelaar's commando and various scattered parties, including 2,000 special service volunteers on parade commando, well-mounted troops impeded by no transport, each man carrying provisions for eight days in his saddlebags, were still operating southeast of Bloemfontein. The column that cleared the south of the Free State from Boers consisted of the divisions of Gen. Chermiside and Gen. Pole-Carew, with mounted yeomanry, colonials, etc., the whole force numbering about 12,000 men under the command of Gen. Rundle.

Boer Appeal for Intervention.—On March 5 the presidents of the Orange Free State and of the South African Republic addressed overtures of peace to the Marquis of Salisbury on the condition that the independence of both republics as sovereign international states should be assured, and that British subjects who had taken part in the war with the republicans should suffer no harm in person or property. Lord Salisbury replied on

March 11 that for having in recent years acquiesced in the existence of the two republics Great Britain had paid the penalty of having the two colonies in South Africa invaded and overrun, with great destruction to property and life, and large portions of the British dominions claimed as having been annexed to one or the other of the republics, entailing a costly war and the loss of thousands of lives; and in view of the use to which the two republics had put the position which was given them, and the calamities which their unprovoked attack had inflicted upon the British dominions, the British Government was not prepared to assent to the independence either of the South African Republic or of the Orange Free State. The two presidents at the same time addressed an appeal to each of the European cabinets and to the Cabinet at Washington, asking for the intervention of the powers to bring about a peace based on the independence of the republics. Because the British Prime Minister had declared unofficially at the beginning of the war that no proposals for arbitration or conciliation would be considered and because the British Government had already declined to accede to the independence of the republics, none of the Continental powers were willing to undertake mediation, nor were they moved by the pleadings of Boer envoys or of President Kruger, who was received with honor in France, but was deterred from going to Germany by the refusal of the Emperor Wilhelm to receive him, and went to Holland, where he had the sympathy of both the people and the Government. The American Government, receiving the appeal for intervention on the day preceding Lord Salisbury's rejection of the Boer proposal, communicated the request to the British Government, expressing the hope that a way to bring about peace would be found, and offering the good offices of the United States to that end. The British Government replied that no intervention of a foreign power would be acceptable. When the Boer delegates who came to the United States later endeavored to move the administration to take further steps to apply the principles of The Hague peace convention, they were reminded that the very terms of the convention indicated the inadvisability of further action after conciliation had been refused.

Occupation of Pretoria.—At the beginning of May Lord Roberts was ready to advance northward with an army of over 60,000 men, enough to occupy a broad front extending beyond the Boer line of defense. He planned to turn the position on the Modder by an advance from Thaba Nchu, the columns wheeling with Karee on the railroad for their pivot. Gen. Botha, who had brought away the Dutch raiding columns from the south without losses, and held together the forces of the two republics, anticipated the turning movement, and had a strong force to oppose Gen. French's progress on the British right flank from Thaba Nchu to Brandfort, which was undertaken on May 1, after the road bridge over the Modder at Klipdrift and the hills near Karee had been occupied by mounted infantry. The front therefore extended over 40 miles. The Boers adapted their tactics to the open ground on which they had now to fight for the first time. They had strong reserves in close columns, and met the British advance by a heavy shell fire, followed by the direct onset of swarms of riflemen, which were re-enforced when driven away, enabling them to hold their ground until the weight of the British infantry pressed them back. Gen. Ian Hamilton's column forced a passage northward from Thaba Nchu, and after several lines of kopjes were taken

by the Canadians, the Gordon Highlanders, and the Shropshire regiment on May 2, the Dutch forces were withdrawn from the hills around Thaba Nchu and massed northward and eastward, where they clung to the flanks of the columns that marched along the Winburg road. Brandfort was occupied on May 3, Gen. Delarey retiring his forces to the hilly country to the northeast, into which Lord Roberts refused to be enticed. The effective British field force operating in South Africa consisted of 128,000 regulars, 1,000 marines, 20,000 militia, 8,000 yeomanry, 10,000 volunteers, 25,000 colonial troops raised in South Africa, and 8,000 from other colonies, making a total of 200,000. The last contingents from England consisted of 17 battalions of militia and 3,000 yeomanry, and from the colonies 5,000.

The beginning of the British advance brought about new dispositions of the Boer forces. The bulk of the besieging force was recalled from Mafeking just as Col. Mahon's relieving column which had formed a junction with Col. Plumer's party, making a force of 2,300 men, came to the succor of the starved and exhausted garrison on May 17. A Boer commando attacked the column on May 13, inflicting a loss of 31 men, and on the same morning Capt. Eloff led a storming party of 150 men, which forced an entrance into the town, was cut off in the rear, and found internal fortifications that stopped further advance, and after fighting all day and losing 29 killed and wounded, surrendered, the British loss having been 6 killed and 11 wounded.

To prevent the concentration of all the Boer forces on his front Lord Roberts ordered a simultaneous advance from Kimberley against the burgher divisions in the west and in Natal upon the Biggarsberg line of defense. The advance to Winburg and Kroonstad could not be safely made until the gap southeast of Bloemfontein was effectually closed by the occupation of the line from Thaba Nchu to Ladybrand. The Boers prepared for the invasion of the Transvaal by ordering all British subjects to leave the country. The Boers had prepared to defend Brandfort stoutly, 4,000 strong, but were forced to retreat hastily to escape being surrounded. The British reached the Vet river on May 5, and Gen. Hutton's mounted infantry had a severe engagement with the Boers, who retreated when their right flank was turned. At Smaldeel junction a quantity of stores were captured. The British were now in possession of the railroad, which was not much injured except that the bridge over the Vet was gone. Gen. Ian Hamilton's force, with Gen. Broadwood's cavalry and some mounted infantry, advanced independently toward Kroonstad, driving the Boers out of a strong position at Houtnek, reaching Neel Welkott on May 4, and on May 6 taking possession of Winburg. Senekal was occupied, and the column moved on to Ventersburg. The principal advance of the British was along the line of the railroad, and the main body of the Republican troops fell back toward the Zand river and Kroonstad. The country was hilly, and yet not well adapted for defense. The Boers made a stand north of the Zand at Rietspruit, where Lord Roberts attacked them on May 10 with 35,000 men. They occupied a line much too widely extended for their numbers, intending to fight for delay. The greatly superior strength of the British broke through their defense without difficulty, and on May 12 Lord Roberts entered Kroonstad without further opposition. A demonstration against Thaba Nchu was attempted by the Boers prior to the last battle, but this did not divert Lord Roberts from his objective because Gen. Rundle's

division, re-enforced by Gen. Brabant's force, could deal with the countermarching commandos. President Steyn removed his Government to Lindley, but fled from there when Ian Hamilton's cavalry arrived on May 17 to capture him. The Boers had defended their position on the Vet with little spirit, and when the British forces approached the entrenched position that they had prepared on the Rhenoster river they abandoned their fortifications without a blow, and retired across the Vaal, destroying one span of the railroad bridge at Vereeniging after they had crossed. On May 26 the British vanguard crossed the Vaal near Parys, and on the following day the main body encamped in the Transvaal, having crossed in four places with a front of 35 miles without encountering serious opposition, the Boers having been misled as to the passage by Gen. Hamilton's operations at Lindley and Heilbron and the British having rapidly changed their front from northeast to northwest. The rapid advance on Vereeniging saved the coal mines on both sides of the river from being crippled as those in northern Natal were to prevent the British from using the railroads for transport. By a march of 20 miles on May 28 the main column reached Klip river and drove away the Boers who were there to contest the advance. At Klip River Berg they were erecting fortifications to defend the approach to Johannesburg from this direction. Lord Roberts had, however, sent Gen. French's cavalry to make a *détour* to the west of Johannesburg. While the Boers were still busy preparing for the defense of the Witwatersrand, the British vanguard passed on to Germiston, and seized the railroad junction. The mounted troops that went round the Boer positions on the left seized the railroad at Elandsfontein, and thus stopped the re-enforcements coming from Heidelberg and Natal. The advance was so rapid that the Boers had no time to organize effective opposition. The lines of communication were held by the British, although an attempt to cut the railroad between Heidelberg and Pretoria had failed, the mobile column sent round on the east having been beaten. Gen. Botha had prepared several positions where he intended to oppose the British, but his men abandoned their unfinished fortifications when the enemy came near. The kopjes and ridges south of the Rand were cleared by Gen. Hamilton's column, which worked round to the west of Johannesburg, while Gen. French's cavalry seized the important positions on the other side and two whole divisions followed, taking positions on the north and the south. The main body of the British consisted of two infantry divisions with auxiliary arms. The mounted troops under Gen. French and the column under Gen. Ian Hamilton moved from the Vaal drifts westward and advanced in a parallel line against the Boer camp at Klip River Berg. On May 28 Major-Gen. George Pretymann, who was appointed Military Governor at Bloemfontein, proclaimed the annexation of the Free State under the designation of the Orange River British Colony. On May 28 Gen. French's column engaged the Boers under Gen. Louis Botha at Gatsrand, and were held in check until re-enforcements arrived, when the Boers retired.

Pretoria was not provisioned for a siege and was deprived of the guns that were formerly mounted in the forts, but were taken away to be used in the Natal campaign and could not be brought back. At the request of the United States consul, Adelbert Hay, the Boer authorities before leaving liberated 20 British officers with the object of preventing disturbances among the British prisoners of war. President Kruger and the other Transvaal officials went to Waterval Boven on the way

to the hilly Lydenberg district of northern Transvaal, where great quantities of ammunition and provisions had been accumulated. Commandant Krauss surrendered Johannesburg to Lord Roberts on May 31. The mines, which it was feared might be destroyed by the Boers, were found intact, some of them having been in continuous operation during the war. The rapid movement of Lord Roberts's army, which entirely disconcerted the Boer generals and gave them no chance to offer any formidable resistance, was mainly due to the transport service organized by Lord Kitchener. Johannesburg was completely surrounded by various British divisions before the Boers had completed their dispositions for the defense of the Rand, and the overwhelming numbers of the British, holding the roads, compelled the commandos that were posted in points of vantage to make their escape with their artillery before it was too late. Several guns were captured, with many wagons of stores and ammunition, and numbers of burghers gave up their rifles and horses. The foreigners who had been fighting with the Boers or working in the arsenals crowded the trains for Delagoa Bay.

The Boers after evacuating the Rand took up a position at Six Miles Spruit to contest the advance to Pretoria. The leading column of the British arrived there on June 4, cleared one bank of the spruit with a swarm of mounted infantry and the other with a few rounds from the heavy guns which had been placed in the fore part of the column for the purpose, and frustrated the efforts of the Boers to get at the flank and rear by deploying a great force of mounted troops. The first attempt of the British to chase the Boers was foiled by a heavy fire from masked guns, but before night the Boers were driven from all their positions and sent fleeing through Pretoria, and the British artillery began to bombard the Pretoria forts, upon which Gen. Botha offered to surrender the capital. Lord Roberts entered and took possession on June 5. The commissariat and supplies of Gen. Botha's army were completely disorganized, and the Boers were disheartened because their resistance had been so easily brushed away by the overwhelming British force. The annexation of the Orange Free State stirred up a spirit of resistance and resentment among all the Dutch of South Africa that was destined to put new life in the defense of the republics, since it was now clearly apprehended that they had to fight for their political existence. The Afrikaners of Cape Colony held a people's congress at Graaff Reinet, at which they affirmed that the majority of the colony ascribed the war to the intolerable, unwarrantable, and unconstitutional action of the British ministers, and condemned the annexation of the conquered territories, asserting that the only means of securing peace and tranquillity in South Africa was to restore the unqualified freedom of the republics and to give the Cape Colonists a voice in the choice of their governor, so as to abolish the need of standing armies to control the people. By the capture of Pretoria Lord Roberts released 151 officers and 3,500 men who were held there as prisoners of war, but 10 officers and 900 men were taken away by the Boers and placed in confinement at Nooitgedacht. The prisoners had fared far better than the Boer captives at Simonstown, who were confined in prison ships and in cramped, dirty, insanitary quarters in the fortress, where as many as 40 deaths occurred in one week from typhoid fever and filth diseases. Such treatment of the men who stood the bombardment of Paardeberg with lyddite shells for ten days and the exile of the prominent ones to St. Helena and Ceylon helped to embitter the feelings of the Dutch toward

the British Government. The sentiments of the colonists were aggravated still further by the determination of Sir Alfred Milner to punish as traitors those of their numbers who had volunteered to aid their brothers in the republics in the defense of their independence. When Lord Roberts adopted later the mistaken policy of burning farmhouses and deporting the women and children as a means of bringing pressure upon the men in the field he only prolonged the conflict, because the Boers whose possessions were destroyed and whose families were broken up had no motive to cease fighting, but a deep motive to continue the conflict to the last. As soon as he entered the Transvaal Lord Roberts issued a proclamation to the effect that burghers who had not taken a prominent part in the policy that led to the war and were willing to lay down their arms and bind themselves by oath to take no further part in the war would be allowed to return to their homes, and after the occupation of Pretoria he announced that such burghers would be allowed to retain possession of their stock or would receive the current market value for it if it were required for the troops. The stock of burghers still under arms could therefore be seized as spoils of war.

The northward advance of the British from Bloemfontein drew the Boers away from Natal in great numbers, weakening the line that had held the Biggarsberg range against the repeated assaults of Gen. Buller's greatly superior force. The Boers could not be held in Natal when their homes in the rear were exposed to the flying columns of Lord Roberts's army, and when railroad communication with Pretoria was threatened. On May 7 Gen. Sir Redvers Buller began the advance which had been planned in combination with the movement of Lord Roberts in the Free State. Moving out from around Flanderslaagte, the van of Gen. Buller's army reached the drift of Sunday river on May 9, and Thorneycroft's mounted infantry occupied the high hill of Indoda, which for two months had been the Boer advanced post and outlook. With Lord Dundonald's cavalry guarding the flanks, the army wheeled around, with Indoda as the pivot of the movement. Gen. Buller planned a simultaneous attack on the Biggarsberg position by the main column from the south and southeast and by Col. Bethune's mounted column from the east. The Boers expected a frontal attack near Beith, but not a circuitous movement flanking their position from beyond Helpmakaar and from Pomeroy. On May 13 the battle was opened by artillery in the vicinity of Beith, and the British naval guns continued firing after the Boers had taken their guns away. The hill of Uithoek, near Helpmakaar, was seized by Thorneycroft's mounted men, who moved eastward and formed a junction with Col. Bethune's cavalry. When the Boers saw the British on their extreme left they moved eastward, racing on the crest of the range with the mounted British troops in the valley, both striving to occupy first the high ground about halfway between Pomeroy and Helpmakaar. Col. Bethune's men reached the goal first. The Boers evacuated Helpmakaar in the night and Dundee the next day.

Gen. Buller had been instructed merely to keep the enemy occupied in Biggarsberg. His turning movement compelled the defenders who were left to abandon their line of defense, which was impregnable if strongly held. The Boers retreated by railroad from Glencoe, which was occupied by the British on May 16. They followed up the Boers to Newcastle, where they were kept in check by artillery and infantry fire until the burghers departed on the cars. A squadron of mounted in-

fantry fell into an ambush near Vryheid, and few escaped capture or death. The Boers continued their retreat by rail toward Heidelberg, and as soon as they evacuated the country the British occupied Utrecht, Volksrust, and the other places. The burghers still held positions of great natural strength from which they could impede the northward march of Gen. Buller's army. They were expelled with difficulty from Dornberg, east of Newcastle. On May 30 Gen. Clery bombarded Lang's Nek, where the Boers had made intrenchments and placed guns in position. They occupied Majuba also, and Pongwana, a fresh commando having arrived to stop the further advance of Gen. Buller's army.

In the west, Gen. Hunter crossed the Vaal at Windsorton, occupied Fourteen Streams on May 7, the Boers retreating hastily and abandoning stores and ammunition, and sent a flying column toward Mafeking, which occupied Vryburg on May 9. This was the column that entered Mafeking on May 17. Sir F. Carrington was at the same time marching to the relief of the brave garrison and the people of Mafeking, who had endured the sorest privations and withstood the most persistent assaults, not because any military advantage would be lost by surrender or gained by the Boers, but because it had become a point of honor on the part of the British to keep their flag flying and on the part of the Boers to lower it. Gen. Carrington brought his troops into Rhodesia by the Beira Railroad with the permission of the Portuguese Government, which defended its act of complaisance to England on the plea of an ancient alliance. Lord Methuen entered Hoopstad without opposition on May 18. Gen. Duprez and Gen. Daniels surrendered to the British, with a few of their men. While the main army under Lord Roberts was advancing up the line of the railroad from Bloemfontein to Johannesburg and Pretoria, Lord Methuen's division continued its march through the Orange Free State to Heilbron in order to occupy the places that were left behind by the troops invading the Transvaal and to guard the communications in conjunction with Gen. Rundle's division, which marched northward east of the railroad through Senekal, while Gen. Brabant's horse secured the neighboring country. Before the arrival of these troops a force of Boers made prisoners of a whole battalion of yeomanry that was intrenched at Lindley. Lord Methuen by a forced march attempted a rescue, but arrived too late.

Campaign of De Wet and Botha.—President Kruger established a new capital of the South African Republic at Machadodorp, and President Steyn made Bethlehem the seat of Government for the Orange Free State. While the British were endeavoring to organize a new rule at Pretoria and Lord Roberts, with less success than at Bloemfontein, was inviting the burghers to deliver up their arms and return to their farms, the Boers developed fresh activity in his rear and struck at his lengthened line of communications. On June 4 Commandant de Wet captured north of Rhenoster a convoy of 55 wagons, containing food, clothing, and ammunition on the way to Heilbron. He cut the telegraph and tore up the railroad at Roodeval, north of Kroonstad, on June 5, and two days later made captives of all the men of the Derbyshire regiment except 35 killed and 111 wounded. This was accomplished by a detachment of the army that Gen. de Wet had assembled in the Bethlehem district, which posted guns unobserved on the heights surrounding the camp. Gen. Louis Botha rallied and reorganized his forces east of Pretoria. Gen. de Wet held a line extending along the mountain ranges from Ficksburg on the

Basutoland frontier 40 miles northwestward nearly to Senekal, and from that point eastward for a like distance to Bethlehem. Gen. Rundle's division, resting on the railroad from Winburg, was unable to take the offensive, and stood in danger of having its communications cut off. Troops were moved down from the north to relieve the pressure. Gen. Rundle announced to the Boers who were fighting that unless they surrendered within three days their farms and all their possessions would be confiscated.

To the dismay caused by the defeat of the Boer forces before Johannesburg and Pretoria and the flight of the President was added mistrust because President Kruger took with him £2,500,000 of gold. Gen. Botha retired to a fortified position at Pienaar's Poort, 12 miles east of the city. He had a small force at first, which grew rapidly until he was able to stop the supplies that the British were collecting in the country. Even before the surrender of Pretoria, when it was seen that Gen. Botha's plan of defense must fail, some of the military leaders as well as civilians were disposed to treat for peace, and afterward negotiations were carried on with Gen. Botha until Gen. de Wet succeeded in cutting the British communications. The burghers in Pretoria were greatly encouraged by the rapid resumption of Boer activity, and ceased to surrender arms, whereas 5,000 Mauser rifles had been delivered up till then, so that Lord Roberts determined to attack. Botha's position in front was so strong that he could place most of his troops on his flanks, which the British assailed with two strong columns, which were repulsed on June 11, but renewed the attack on the following day and drove the Boers back to a second position, which was evacuated when they saw that they were nearly surrounded. Gen. Ian Hamilton overtook the rear guard and was wounded in the action that ensued. Gen. Botha fell back on Middelburg.

Gen. Buller in Natal forced Botha's pass on June 8, threatening the communications of the Boers, whose fortified position at Laing's Nek stopped his advance along the line of the Durban Railroad. Many of the Boers had gone to re-enforce Gen. Botha, and many others now retreated. Volksrust, Wakkerstroom, and Charlestown were occupied without much opposition. The flanking force that marched round by the Drakensberg mountains had several fights, and before Laing's Nek was surrounded and abandoned by the Boers on June 13 the British losses amounted to 30 killed and 130 wounded. Heavier losses were inflicted on the retreating Boers at Almond's Nek. Natal being cleared of Boers, Gen. Buller entered the Transvaal and established contact with the troops of Lord Roberts, whose plan was to establish a chain of posts between the forces of Gen. Botha and Gen. de Wet and to open the railroads to Durban and Delagoa Bay. When all his columns joined hands he was still unable to stop entirely the raids of Christian de Wet on the Bloemfontein Railroad, and it was long before he held the other railroads. Krugersdorp, Potchefstroom, Frankfort, Standerton, Ameersfoort, and other towns were occupied, but without strong British garrisons they were always open to the Boers, who were able to traverse the two republics from one end to the other in armed parties without fear of the British and without their knowledge.

The armies of De Wet and Botha baffled for months the skill of Lord Roberts and Lord Kitchener. Botha held his own only a few miles west of Pretoria and kept a large part of the British army there. When troops were sent south to pursue De Wet he resumed active harassing operations,

and when they were recalled to drive him away De Wet struck heavy blows. The British kept 200,000 men in South Africa to garrison the towns, guard the railroads from Cape Town, Durban, and Delagoa Bay, and hold in check the forces of the two Boer generals and other scattered commandos, and for this their force, although comprising the entire available military strength of the British Empire, was not sufficient. Commandant de Wet captured in June enough winter clothing for all the burghers in his army, 3,700 shells, and small-arms ammunition sufficient for three years' campaigning. The operations against him were conducted by Lord Kitchener, who for three months tried in vain to hem him in with 40,000 troops, twice as many as his force and Botha's combined. The Boer ammunition ran out soon after the fall of Pretoria. The stores captured from the British, however, supplied the rifles, cartridges, and shells that enabled the Boers to continue the conflict, and all the commissariat supplies that were needed for the Boer soldiers and their horses. When the first attempts were made to sever railroad communications in the rear of Lord Roberts's army he gave notice that farms would be destroyed and stock confiscated for 10 miles on either side of the line wherever the railroad or the trains were meddled with. His military failures led him to apply with greater stringency the method of holding the farms, cattle, and families of the fighting burghers as hostages to induce them to surrender, and even to threaten to confiscate the property of the burghers who were on their farms as a means for bringing pressure on those who were in the field. Lord Kitchener carried this policy for a time to extremes. The homes of the Volksraad members of the Free State and the Transvaal were destroyed for the reason that the British blamed these men for having brought on the war. The territory of both republics was dotted with the ashes of ruined homes, and the practice of destroying farms did more than anything else to keep the burghers in the field. Whenever a Boer commando came to a farmhouse or passed over a farm it was customary to burn the buildings and seize the stock in accordance with a proclamation of Lord Roberts against harboring rebels, as the Boer soldiers were called after the annexation of the republics was proclaimed. Away from the garrisoned towns and the lines of railroad patrolled by the British the Boers moved freely and unobserved, and for a long time no British movement was safe unless carried out with a force as strong as one of the Boer armies. After Commandant de Wet had accomplished his first successful raids on communications Lord Kitchener brought a flying column from Vereeniging to put a stop to such operations, and Lord Methuen hastened with his column from Heilbron to fill the gap that Lord Roberts had left in his bold movement on Pretoria, which would have been less successful if Commandant de Wet had struck before Commandant-General Botha's main line of defense was broken, entailing the immediate loss of Johannesburg, the fall of Pretoria, and the consequent military and political demoralization. The commandos of De Wet and Nell retired after a brush with Methuen's and Kitchener's combined forces, but not before a party had attacked a construction train that was repairing the damage done to the railroad. Strong posts with artillery were established all along, and armored trains with machine guns patrolled the line to prevent its being cut again. Gen. Cronje surrendered Klerksdorp, and one or two of the other Boer commandants gave up when the British appeared because they considered the war over. Commandant de Villiers surrendered in Cape Col-

ony. Gen. Baden-Powell traversed the northern part of the Transvaal, taking possession of Rustenburg and other places and receiving the surrender of numbers of Boers.

The operations by which Gen. Botha was driven from the vicinity of Pretoria and the movements undertaken to restore and protect railroad communication with the south necessitated another halt, the cavalry and mounted troops being again exhausted. Gen. Ian Hamilton having occupied Heidelberg on June 23, Lord Kitchener went to Kroonstad to begin a campaign against Commandant de Wet, whose raids on communications and captures of convoys and detached bodies of troops had a political effect that was more serious than their military importance warranted. Gen. Hunter, who had temporarily taken over Gen. Ian Hamilton's command, advanced on July 1 to Frankfort to co-operate with columns under Gen. Paget, Gen. Clements, and Col. Hickman in an encircling maneuver in the southeastern corner of the Free State, the object of which was to enfold Christian de Wet's little army as in the coils of an anaconda. The operations were partly successful, and had the result of breaking up the last cohesive fighting body among the Boers of considerable strength that operated from a regular base. The town of Bethlehem, which had been President Steyn's capital, was taken on July 7, Clements and Paget having closed in on it from two directions. A cordon was established from Bethlehem to Ficksburg by the divisions of Gen. Hunter and Gen. Rundle joining hands, but it did not hold Christian de Wet, who broke through, with Gen. Broadwood's cavalry in pursuit, attacked Gen. Little's brigade near Lindley, divided his force into two parties, one of which was engaged by Broadwood, crossed the railroad at Honing Spruit on July 21, captured a supply train with 102 Welsh fusiliers, and moved northward toward the Vaal river, being so lightly equipped that he could easily outstrip the British cavalry although carrying abundant supplies. Commandant Piet de Wet, who had offered to surrender before if Lord Roberts would promise not to deport his men, went into Kroonstad, where his commando laid down their arms. The cordon was drawn closer round the remaining Boer forces in the Bethlehem district, mostly local farmers under Commandant Prinsloo. They fought stubbornly from intrenched positions at Retief's Nek and Stabbert's Nek, from which they were driven by artillery into the narrow basin of the Brandwater, and blocked in on every side by Clements, Paget, MacDonald, Bruce, Hamilton, and Hunter's division advancing from Fouriesburg. Gen. de Wet had taken with him 5 guns, the best they had. On July 29 Gen. Prinsloo surrendered in the valley of the Little Caledon after being shelled with lyddite. Over 4,000 men gave up their arms and horses and 3 guns, and were deported to Ceylon. Commandant Olivier with 1,500 men and 5 guns escaped by the mountain road to Harrismith.

Gen. de Wet's arrival in the north was followed by an outbreak of Boer activity west of Pretoria. Lord Roberts was trying to keep open the railroad to Klerksdorp as well as to open up the Natal railroad so as to join hands with Buller, who was working his way slowly toward Heidelberg, repairing the railroad which the Boers destroyed in his front and rear. Lord Roberts was preparing also to send a force against the Boers at Middelburg and to clear the railroad to Delagoa Bay to Machadodorp, where President Kruger had established himself, ready to slip into Portuguese territory and take ship for Europe if the British appeared, and whence he sent continually to the Boer commandos

supplies that were landed at Lourenço Marques. A train was wrecked on the Klerksdorp Railroad. Rustenburg was besieged by a Boer force until Methuen's division arrived from the south. While Gen. Smith-Dorrien was driving the Boers from near Krugersdorp Gen. Grobler's commando captured a squadron of cavalry, three companies of the Lincolnshire regiment, and two guns, the garrison that was holding Nitral's Nek, 18 miles from Pretoria on the road to Rustenburg, the officers having neglected to occupy the hills commanding the camp. Simultaneously other attacks were made on the British right, which were beaten off with difficulty. Gen. Pole-Carew's division, guarding the railroad to Johannesburg, was attacked vigorously, and Grobler routed the garrison at Derdepoort, 5 miles north of Pretoria.

On July 24 Lord Roberts began his general advance against Commandant-General Botha's positions on the Delagoa Bay Railroad, which the Boers quickly evacuated. Gen. French occupied Middelburg on July 27. Renewed aggressive tactics of De Wet and Grobler led to Lord Methuen's marching to the south again to co-operate with Knox and Broadwood in the attempt to capture De Wet and in defending against his raids the trunk railroad. Gen. Ian Hamilton's mobile column was sent back from Middelburg to check Commandant Grobler, who replenished his supplies by upsetting a train near Frederikstad and held Gen. Baden-Powell's command besieged in Rustenburg while Commandant de Wet captured a supply train south of Kroonstad. To counteract the British policy of burning farms in order to induce Boers to surrender, President Kruger and Gen. Botha promised to repay such losses if the burghers would remain on commando. Gen. Hamilton cleared the Boers from the Magaliesberg and reached Rustenburg, but neither he nor Sir Frederick Carrington, marching from Zeerust, had force enough to rescue the garrison of 300 men at Elands river, which had undergone a ten days' siege by Commandant Delarey. Lord Methuen failed in his efforts to intercept De Wet, who crossed the Vaal and joined Grobler in the bush veldt southwest of Pretoria. Attacks on the Delagoa Bay Railroad in the rear of the column that was advancing to Machadodorp were requited by the burning of all farms in the localities where they occurred. For a plot to kidnap Lord Roberts 15 citizens of Pretoria were arrested on Aug. 10. It came out at the trial that the plot had been suggested to the ringleader, a paroled Boer lieutenant named Cordua, by a detective in British pay. A plot to overpower the British garrison in Johannesburg was reported in July, and about 400 Germans, Frenchmen, Swedes, and Americans were deported. The employees of the Netherlands Railroad Company were banished previously.

Lord Kitchener joined with a large force in an effort to close in on De Wet and President Steyn in the Gaterand. Gen. Buller marched northward to establish communications with Gen. French's force, which had advanced on the Lourenço Marques Railroad to Wonderfontein, when Buller, after slight resistance from Christian Botha's commando, occupied Ermelo on Aug. 11. Commandant Delarey increased his force in the western districts of the Transvaal that the British thought they had pacified, until Sir Frederick Carrington's Australian and Rhodesian troopers were compelled to evacuate Zeerust and retreat to Mafeking, and Gen. Ian Hamilton to retire from Rustenburg to Pretoria with his cavalry division and Gen. Baden-Powell's exhausted troops. In this, as in other districts that the British were forced to evacuate after promising protection to the burghers who

submitted, the Boers wreaked vengeance afterward on those who had given up their rifles. Many Boers when the British were in possession of their district offered old muskets and shotguns. Lord Roberts, suspecting that many of the burghers who subscribed to the oath of neutrality afterward rejoined their commandos when the Boers became active in their neighborhood and the British retired, revoked his former proclamation permitting them to remain on their farms, and subsequently he attempted to carry out a plan of internment the civil population in guarded cantonments close to the British camps. It was announced in the proclamation of Aug. 18 that burghers residing in districts occupied by British troops unless they took the oath of neutrality would be deported, and that if they took the oath and afterward broke it they would be punished with death or imprisonment. The Boers were not less rigorous, forcing burghers who had taken the oath to join their commandos on pain of being shot, actually shooting those who gave willing aid or information to the English, and treating all South African volunteers whom they took prisoners with harsh severity, while English soldiers were treated kindly.

The mounted troops of Gen. Broadwood, the divisions of Lord Methuen and Gen. Smith-Dorrien, and his own active force of mounted Cape Colonists and Canadians, with which Lord Kitchener endeavored to draw a cordon of investment around Commandant de Wet's force, each came in contact with this small but formidable commando, and each of them suffered in a sharp rear-guard action, yet all of them together could not hold this remarkably mobile corps, a part of which dissolved into small bands that roved nearly to the outskirts of Pretoria, while the nucleus that remained with the chief slipped through a gap in the tightening circle and got away with all the guns and the train of supplies and ammunition. Commandant Olivier in the extreme east of the Free State escaped with the other remnant of De Wet's army by doubling back when Gen. MacDonald from Ladysmith occupied Harrismith to intercept him. All concentrated bodies of Boers were out of the Free State by the middle of August. Lord Kitchener pursued De Wet till he lost touch of him, then raised the siege of Eland's river. De Wet, passing Commando Nek, demanded its surrender by Gen. Baden-Powell, who with a new command held the position strongly. Gen. Ian Hamilton pushed the Boers out of the Magaliesberg again, capturing two Krupp guns. De Wet meanwhile crossed to the northeast of Pretoria, pursued by Baden-Powell and Paget; then, having escorted President Steyn to where he could safely go on to Machadodorp to confer with President Kruger, recrossed the Magaliesberg range, and returned to the Orange Free State, slipping by Lord Methuen, who marched his men 40 miles a day in the effort to intercept him. Gen. Buller's force had a hard battle on Aug. 24 at Bergendal with Gen. Louis Botha's troops, which were strongly intrenched at Machadodorp, but were pressed at the same time by Gen. Pole-Carew from Belfast, while Gen. French attempted to reach the road north of Machadodorp and cut off their retreat toward Lydenburg. Field-Marshal Lord Roberts was on the field conducting the combined operation. Buller's cavalry rode into a trap and suffered from machine guns and shells at short range, and two companies of the Liverpool regiment wandered into the enemy's position and were annihilated. The position was finally forced by a flanking movement on Aug. 27, and carried by a bayonet charge. Pole-Carew's simultaneous ad-

vance was also stubbornly opposed. On Aug. 28 Gen. Botha retreated toward Lydenburg, leaving 1,800 British prisoners to be released at Nootgedacht.

Guerrilla Fighting.—The action at Bergendal was the last regular battle of the campaign, which degenerated into guerrilla warfare and became more distressing and more bitter in consequence of the retaliatory measures employed on both sides. Commandant Theron began operations in the vicinity of Johannesburg, where hardships were suffered by the civil population remaining in the city, about 30,000, though none greater than the refugees suffered in Cape Town and the other ports, who vainly besought Lord Roberts to let them return to the gold city and resume work. Commandant Olivier led an assault on Winburg, and was himself captured in a sally. New commandos sprang up in the vicinity of Senekal and Bethlehem when De Wet returned to the Orange Free State, and he himself recruited a fresh force around Heilbron. The surrenders of Free Staters to Gen. Hunter at Naauwpoort and to Gen. Rundle at Harrismith now ceased. Commandant Fourie bombarded and captured Ladybrand. Another commando threatened Thaba Nchu. The bands of De Wet cut the railroad north and south of Kroonstad and captured a supply train. The western Transvaal also was in arms in spite of the presence of large forces under Gen. Ian Hamilton, Lord Methuen, and Gen. Carrington.

Gen. Buller, starting from Machadodorp on Sept. 1, moved slowly toward Spitzkop, driving the Boers before him through a difficult mountainous country, and Gen. French pressed on to Barberton, which was occupied on Sept. 13. Lydenburg was occupied previously by Lord Dundonald and Gen. Brocklehurst. When the British cleared the railroad to Komatipoort, which was reached on Sept. 24, Gen. Pienaar with about 3,000 Boers went over the border to surrender to the Portuguese, who destroyed their guns and ammunition. The war was regarded by Lord Roberts as practically over except guerrilla fighting, to deal with which large columns were not necessary. The Boers sometimes captured outposts and surprised detachments, and wherever the British were not present in sufficient strength the whole population was hostile. The organization of a military police capable of carrying out the work of pacification under the changed conditions was intrusted to Baden-Powell, a major when in command of the starving garrison of Mafeking, and now a lieutenant general. Up to the end of October the casualties of the war on the British side were estimated at 40,000. The deaths, including 6,482 from disease, had been 11,739. The Boer losses in killed, wounded, and prisoners were believed to amount to 30,000, half that number being prisoners. The annexation of the South African Republic to the British dominions under the title of the Transvaal Colony was proclaimed by Lord Roberts on Sept. 1. The Boers were informed that none of them would be treated as prisoners of war except those who had been continuously in arms and attached to their commandos; that noncombatants who failed to acquaint the troops of the presence of the enemy would be treated as rebels, buildings sheltering the enemy would be razed, and a fine of 2½s. an acre would be collected on all farms in the vicinity of which railroad tracks were destroyed. Col. Maxwell became Military Governor of the Transvaal. President Kruger and his staff with the archives went to Lourenço Marques. President Steyn returned to the Orange Free State. Vice-President Schalk Burger became acting President of the South African Republic upon the departure

of President Kruger, who before he left the country issued a proclamation declaring the annexations void, as the republics were unconquered and their independence was acknowledged by the powers. The peace delegates in Europe, A. Fischer, C. H. Wessels, and A. D. W. Wolmarans, issued from The Hague an appeal to all nations for intervention and a protest against the action of the British commanders in denouncing and treating as rebels the burghers of the republics, whom until the proclamations of annexation they had recognized as belligerents.

Botha's remaining force, led by Commandant Viljoen, went northward over the mountains with 30 guns. Lord Roberts issued another proclamation calling upon the burghers to lay down their arms, promising that those would not be deported who voluntarily surrendered unless they were prominent military or political personages or foreigners or had broken their oath of submission, and announcing that he would confiscate the stock and supplies of families any of whose members had returned on commando and burn the houses of those who were guilty of sniping. The war meanwhile was actively carried on both north and south of the Vaal by leaders who held isolated British garrisons besieged, captured detachments, usually releasing their prisoners from this time forth after taking their weapons and ammunition, destroyed railroad bridges, and seized supply trains. Louis Botha in the bush veldt of the northeastern Transvaal had a safe base, but could not accomplish much. Delarey to the west of Pretoria was very active, and continued his raids after Grobler, Erasmus, and Theron became quiescent. Christian de Wet, when he gathered his men around him, was the most formidable of all, and kept the whole eastern part of the Free State in a condition in which no British force was safe except in a fortified position. Gen. Charles Knox had the special task of capturing this elusive and resourceful guerrilla chief, and other generals had their forces posted so as to cut off his retreat. Many times he was reported to have been routed or to be completely surrounded, yet at the end of the year he was as formidable as ever, and continued to give occupation to several British generals. When the Canadian and other colonial volunteers returned to their homes Gen. Baden-Powell had 12,000 military police. There were still 200,000 British troops in occupation of the country, and yet parties of Boers could commandeer supplies in Ficksburg, Wepener, Rouxville, Philippolis, and other towns, and in innumerable petty engagements they inflicted almost as great losses on the British as in the regular warfare. Jacobsdal was captured by the Boers after a brave defense. An armored train was captured at Vlakfontein, and a convoy and its escort near Blood river. A train was upset into the Kaap river, and the party sent out to open the line was annihilated. A sharp engagement was fought by Gen. Barton with De Wet at Frederickstad on Oct. 25. On Nov. 6 Col. le Gallais attacked De Wet at Bothaville. The fevers and privations incident to the guerrilla campaigning caused increasing mortality. Gen. Rundle marched a column through the eastern part of the Orange Free State from Vrede to Harrismith, meeting considerable opposition, and Gen. French marched from Machadodorp through Ermelo and Bethel to Heidelberg, fighting all the way with the forces of Commandant Smuts and Commandant Hans Botha. In November a plot against the life of Lord Roberts was discovered, in which Greeks and Italians were the conspirators.

It was decided to enroll the British residents in a corps called the Rand Rifles, the Military Gov-

ernor informing them that they would have to bear the military burden in future rather than professional soldiers. The chief reason now for not letting the refugees return to Johannesburg was that the volunteers, who were the most useful fighters, could not then be kept in the field. A land settlement commission under the chairmanship of Arnold Forster studied the question of establishing military settlers on confiscated farms in the Transvaal and Orange River colonies. The new constabulary and other forces kept in garrison could have land after a given term of service on condition that they hold themselves ready as reservists to return to the ranks. Sir Alfred Milner was selected to be the Governor of both the new British colonies and High Commissioner of British South Africa still, but no longer Governor of Cape Colony. Lord Kitchener was appointed commander in chief of the forces in the field, Lord Roberts being summoned to England to succeed Lord Wolseley as commander in chief of the British army. On Nov. 24 Commandant de Wet, who was accompanied in his wanderings by President Steyn, compelled the surrender of 400 troops with 2 guns at Dewetsdorp. From this time strong bodies of Boers gathered in the southern districts of the Free State and began to invade Cape Colony. Gen. Knox once more took up the pursuit of De Wet. Gen. Paget engaged with the joint commando of Viljoen and Erasmus north of Kroonstad at Bronkhorst Spruit, on Nov. 29, and sustained severe losses—a regimental commander killed, 10 officers wounded, and 13 men killed and 59 wounded. Commandant Delarey advanced with a strong commando from the western Transvaal through the Magaliesberg, and on Dec. 13 surprised the garrison at Nootgedacht, 1,200 strong, and captured 18 officers and 555 men of the Northumberland Fusiliers at Commando Nek after 11 officers and 54 men had been killed and wounded and the ammunition was exhausted. Gen. Clements was compelled to evacuate his camp and retreat.

On Dec. 16 the Boers began an incursion into Cape Colony. When they entered the colony before 80 per cent. or more of the Afrikaner population, led by the chief local officials, joined the commandos in the northern districts of Cape Colony, as also in Bechuanaland and Griqualand. Many of the younger men remained with the commandos when they retreated into the Orange Free State, and of those who returned to their farms the most active and prominent were afterward tried and many of them convicted under the new law of treason enacted by the Cape Legislature or were still in jail awaiting trial. There was no eagerness to join the Boer ranks when the burghers again crossed the Orange river in December, 1900. An Afrikaner congress was being held at Worcester, but under the eyes of the military authorities, who sent a guard of 1,500 soldiers and trained 10 guns on the town. The resolutions recorded the conviction of the delegates that, in view of the deplorable condition into which the people of South Africa were plunged and the grave dangers threatening its civilization, its highest interests demanded, first, the termination of the war that was raging with untold misery and horror, such as the burning of houses, the devastation of the country, the extermination of the white nationality, and the treatment to which women and children were subjected, which will leave a lasting heritage of bitterness and hatred, while seriously endangering further relations between civilization and barbarism in South Africa; second, the retention by the republics of their independence, whereby alone the peace of South Africa can be maintained. Camps

were established at Krugersdorp and Heidelberg, into which the people living on farms were collected. The farms on the Rand were cleared, as it was believed the people supplied food and information to the enemy, and 4,000 persons were assembled in one laager under a military guard close to Johannesburg. Lord Kitchener issued a proclamation on Dec. 20, notifying burghers that if they surrendered voluntarily they would be permitted to live with their families in Government laagers until the war was over.

Gen. de Wet's intention of crossing into Cape Colony in the beginning of December was frustrated by Gen. Knox, who had four columns to head him off and surround him, and his force was hard pressed and abandoned carts and horses at the Karreepoort drift of the Caledon. He broke through the cordon by running the gantlet of two fortified posts and Thorneycroft's artillery through Springhahn Nek in the Thaba Nchu district, losing 1 of the guns he captured at Dewetsdorp and 25 prisoners. Hertzog's commando of 1,000 men crossed into Cape Colony at Rhenoster Hoek and marched on Venterstad. Another force, 2,000 strong, under Phil Botha and Haasbroek, crossed at Sand drift. The general position in South Africa caused Lord Kitchener to ask for re-enforcements, although he had over 210,000 men, of whom 143,000 were regulars, not including Baden-Powell's colonial police and the new Rand Rifles. The total number dispatched to the seat of war from the beginning was 267,311, including about 7,500 drafted from India, 11,000 volunteers from Australia and Canada, 29,000 raised in South Africa, and 10,000 yeomanry, 21,500 militia, and 11,000 volunteers from the United Kingdom. Since Aug. 1 there had been 12,500 re-enforcements arrived. The number killed in battle up to Nov. 30 had been 3,018; wounded, 13,886; died from disease or wounds, 7,786; in hospitals at the beginning of October, 11,927; invalided home, 35,548. The Australasian colonies were invited to send further mounted contingents, and new pecuniary inducements were offered to volunteers in South Africa and the United Kingdom. The ordering of re-enforcements from Great Britain deterred the Cape Dutch from beginning another rebellion when the Republicans appeared among them. The Boers who entered Cape Colony, most of them detached from De Wet's force and in need of the clothing and other supplies that they commandeered in the towns they entered and of the stock that they took from the farms, drove back the bodies of Brabant's horse and Cape mounted rifles that opposed them, but found Colesberg, Burghersdorp, Stormberg, and the other military positions strongly occupied. Gen. Brabant hastened from Cape Town to conduct operations against them, summoning whatever armed force existed in the colony. There was alarm in Cape Town. New volunteer bodies were formed. Martial law was proclaimed throughout all the farming districts, and colonists were warned that if they assisted the invaders they would meet the fate of traitors. The pro-British colonists were armed and assisted the Cape military, while a column was organized by Lord Kitchener to co-operate in the expulsion of the Boers. Hertzog's column occupied Britstown and cut the railroad south of De Aar Junction. The other column, re-enforced by Boers from Zoutpan, seized Philipstown, but retired when Thorneycroft's mounted infantry arrived. Gen. Settle, Gen. Inigo Jones, and Gen. MacDonald were ordered to co-operate against the Boers in Cape Colony, who were finally headed and driven, some northward and some westward, after having penetrated farther into the colony than the invaders

who raised a serious rebellion a year before. Other bands trekked over the western border of the Transvaal into the Vryburg district. While the invasion of Cape Colony necessitated a concentration of British forces in that new focus of disturbance, the commandos in the vicinity of Johannesburg became aggressive and were with difficulty checked by Gen. French. Commandant Beyers, who had been co-operating with Delarey, threatened the railroad immediately south of Pretoria at Kaalfontein, and passed eastward when attacked by the cavalry of Gen. William Knox. In the northwestern Transvaal Gen. Clements was unable to restore British authority in the Rustenburg district. Lydenburg was occupied by Louis Botha, who resumed the offensive, destroyed the railroad at various points, and on Dec. 29 captured Helvetia, killing and wounding 50 of the garrison and taking 200 prisoners. Commandant de Wet gathered together another strong and well-equipped commando and occupied the country between Ficksburg, Senekal, and Winburg, while Gen. Charles Knox could do nothing more than guard the line between Winburg and Ladybrand to prevent him from joining in the invasion of Cape Colony. The enlistment in the United Kingdom of 5,000 yeomen was authorized. New Zealand raised a mounted force of 500 men, half of them Maoris. Militiamen were recruited in Great Britain to bring up the strength both of their own regiments and of the regulars in South Africa. Selected Johannesburg miners, 1,500 to begin with, were allowed to return to work organized as a military body. Volunteer regiments in England were invited to send out officers and men to take the place of those who returned home. Gen. Baden-Powell was careful in selecting the men for the colonial constabulary, who were to receive as a prize the choicest farms in the new colonies and to uphold the power of the British Empire among the Dutch population in the future. The fighting in January was more severe than in December, and in February there were 150 killed on the British side in a large number of petty actions, while 24 officers and 624 men died of disease and wounds. Up to the end of February deaths from all causes amounted to 664 officers and 13,137 men, and 1,763 officers and 40,594 men had been invalided to England, but a large proportion of these rejoined the ranks.

TURKEY, an absolute monarchy in eastern Europe and western Asia. The Sultan is the eldest prince of the line of Osman. Abdul Hamid II, the thirty-fourth Sultan of the Osmanli dynasty, born Sept. 21, 1842, succeeded his brother, Murad V, who was deposed on Aug. 31, 1876, on the ground of insanity. The Sultan is recognized as the Khalif of Islam, the temporal chief, not only within the Ottoman Empire, but by a large proportion of the Sunnite Mohammedans outside. In matters of religion and law the Sultan is advised by the Sheikh-ul-Islam and guided by the decisions of the Ulema, a body of eminent expounders of the sacred books sitting in Constantinople. In civil and political matters the chief executive officer under the Sultan is the Sadrazam, or Grand Vizier. These two functionaries, together with the ministers at the head of the departments of state, form the Privy Council, or Cabinet, which was composed at the beginning of 1900 as follows: Grand Vizier, Halil Rifat Pasha; Sheikh-ul-Islam, Mehmed Jemaleddin Effendi; Minister of War, Riza Pasha; Minister of the Interior, Memduh Pasha; Minister of Justice and Worship, Abdurrahman Pasha; Minister of Marine, Hassan Pasha; Minister of Foreign Affairs, Ahmed Tefvik Pasha; Minister of Finance, Reshad

Pasha; President of the Council of State, Mehmed Said Pasha; Grand Master of Artillery, Mustafa Zeki Pasha; Intendant of Religious Endowments, Galib Pasha; Minister of Education, Zundi Pasha; Minister of Commerce and Public Works, Zihni Pasha.

Area and Population.—The area of the Turkish Empire still under the dominion of the Sultan is estimated at 1,111,741 square miles, and the total population at 24,515,500. Including the tributary states of Bulgaria and Eastern Roumelia, Samos, and Egypt, with Thasos, and also Bosnia and Herzegovina, Crete, and Cyprus, now under foreign administration, the total area is 1,576,677 square miles, and the total population 39,810,000. The area of Turkey in Europe, comprising the vilayets of Constantinople, Adrianople, Salonika, Monastir, Kossovo, Scutari, and Janina, is 62,744 square miles, with 6,086,300 inhabitants. Asia Minor has an area of 194,392 square miles and 9,238,900 inhabitants; Armenia, 72,491 square miles and 2,472,400 inhabitants; Syria and Mesopotamia, 209,714 square miles and 4,667,900 inhabitants; Arabia, 173,700 square miles and 1,050,000 inhabitants; Tripoli, 398,900 square miles and 1,000,000 inhabitants. The population of Constantinople is about 1,125,000; Smyrna, 210,016; Bagdad, 145,000; Damascus, 140,487; Aleppo, 127,149; Beyrut, 118,811; Salonika, 105,000. About half the population of European Turkey is Christian. In Asia Minor the Christians form 17 per cent. of the population; in Armenia, 26 per cent.; in Syria, 18 per cent. in the vilayet of Aleppo, 28 per cent. in the vilayet of Syria, 31 per cent. in the vilayet of Beyrut, and 80 per cent. in the Lebanon. Besides the Moslem religion the Turkish Government recognizes the Franks, or Roman Catholics, the Greek Orthodox Church, the Armenians, the Syrians and United Chaldeans, the Maronites of the Lebanon, Protestants, and Jews.

Finances.—Out of a total revenue of £ T. 18,500,000, the public debt absorbs £ T. 6,500,000. Various revenues are hypothecated for the debt and placed in charge of a foreign Council of Debt Administration, which in the financial year 1900 received £ T. 2,274,378, of which £ T. 1,125,527 came from the indirect taxes on liquors, salt, stamped paper, fisheries, silk, etc., £ T. 702,887 from the tobacco *régie*, £ T. 90,000 from tithes on tobacco, £ T. 202,702 from the Eastern Roumelian tribute, £ T. 102,596 from the share of revenue of the island of Cyprus, £ T. 50,000 from customs duties on Persian tobacco, and £ T. 666 from various sources. The cost of administration was £ T. 119,676, leaving £ T. 2,154,702 net receipts, against £ T. 2,132,728 in 1899 and £ T. 2,097,304 in 1898. The total amount of loans outstanding on June 30, 1899, was £ T. 127,832,553, of which £ T. 76,937,762 were the converted debt of 1881, £ T. 28,364,460 various loans obtained between 1888 and 1894, £ T. 13,953,080 lottery bonds, £ T. 4,783,451 the 5-per-cent. customs loan of 1886, £ T. 848,600 the 4-per-cent. priority bonds of 1893, and £ T. 2,945,200 the 5-per-cent. loan from the Ottoman Bank. Other debts are: £ T. 24,513,000 war indemnity due Russia, £ T. 50,000 of indemnities to Russian subjects, and £ T. 273,494 for the Damascus Railroad.

The Army and Navy.—The army is distributed in 7 *ordus*, or military regions, 6 of which can furnish in time of war 4 army corps each, viz., 1 corps of *nizams* or regular troops, 2 corps of the *redif* or territorial army, and 1 corps of *mustahfiz*, reserves of the territorial army. The *nizam* troops are kept at their full strength in time of peace, excepting some special bodies. The first 5 army corps have each 64 battalions of *redif*,

the 6th has 44. Each army corps consists of 2 divisions of infantry, except the 3d and 4th, which have 3 and 4 respectively; 1 division of cavalry, except the 7th; and 3 brigades of artillery, of 2 regiments of 2 sections, each section consisting of 3 batteries, and 1 section of horse artillery, excepting the 6th, which has 1 regiment with 17 batteries, and the 7th, which has 1 regiment with 7 batteries. In Arabia, 1 division of 17 battalions, 2 squadrons, and 2 mountain batteries, and in Tripoli 1 division of 17 battalions, 1 brigade of cavalry, and 3 regiments of artillery, are maintained, which are outside of the army corps. The strength of the standing army in 1900 was about 350,000 men; of the territorial army, 364,000 men; of the *mustahfiz*, 120,000 men; of the general levy, 666,000 men; total war strength, 1,500,000 men, half of whom have received a thorough military training.

The naval force in 1900 consisted of 3 casemated ironclads, 2 turret ships, 2 old broadside ships, 9 old ironclad gunboats, 2 river gunboats, 2 destroyers, and 15 first-class and 7 second-class torpedo craft, with 2 unarmored cruisers, 6 corvettes, 10 gunboats, 3 yachts, and 3 avisos. There were building 1 armored cruiser, 1 destroyer, 2 torpedo boats, 6 cruisers, and 6 first-class gunboats. The navy was manned by 2 admirals, 9 vice-admirals, 16 rear-admirals, 130 captains, 70 commanders, 300 lieutenants, 250 lieutenant commanders, 200 ensigns, 480 mechanicians, 50 surgeons, 212 commissary officers and paymasters, about 3,000 petty officers and sailors, and 9,650 marines.

Railroads, Posts, and Telegraphs.—The length of railroads in operation in 1899 was 2,796 miles, of which 1,240 miles were in Europe, comprising the Oriental railroads joining the European system, 786 miles, and the lines from Salonika to Monastir, 137 miles, and from Salonika to Constantinople, 317 miles. In Asiatic Turkey there were 1,556 miles, the Anatolian Railroad having a length of 634 miles, the Aidin line 320 miles, the railroad from Smyrna to Cassaba 321 miles, that from Beyrut to Damascus 96 miles, from Damascus to Nazrib 64 miles, from Jaffa to Jerusalem 54 miles, Mersina to Adana 42 miles, and Fondania to Brussa 25 miles. A line from Acre to Damascus, 157 miles, was not completed. The German company that built the Anatolian Railroad has contracted to build a line from Konieh to Bagdad and Basra before 1908.

The postal traffic in 1895 was 10,366,000 internal, 2,512,000 international, and 1,848,000 transit letters, 225,000 postal cards, and 1,941,000 internal, 1,183,000 international, and 1,230,000 transit newspapers and circulars. The receipts were 5,724,641 francs, and expenses 1,839,565 francs. The length of telegraph lines is 21,800 miles, with 33,760 miles of wire. The number of messages in 1895 was 3,124,168.

Commerce and Production.—The total value of imports in 1898 was estimated at £ T. 24,070,000; exports, £ T. 13,750,000. The value of imports in the financial year 1897 was £ T. 21,359,710, and of exports £ T. 15,428,460. The imports of cloth in 1896 were £ T. 1,510,000 in value; sugar, £ T. 1,400,000; grain and flour, £ T. 1,370,000; quilting, £ T. 1,116,000; yarns, £ T. 1,013,000; coffee, £ T. 933,000; hides and leather, £ T. 568,000; animals, £ T. 544,000; petroleum, £ T. 512,000; madapolam, £ T. 471,000; cashmere, £ T. 401,000; iron manufactures, £ T. 393,000; timber, £ T. 375,000; drugs and colors, £ T. 352,000; butter and cheese, £ T. 284,000; paper, £ T. 274,000; coal, £ T. 270,000; silks, £ T. 252,000; clothing, £ T. 258,000; glass, £ T. 227,000; wool and cotton goods, £ T. 221,000;

carpets, £ T. 215,000. The exports of raisins were £ T. 2,197,000; raw silk and cocoons, £ T. 1,991,000; minerals, £ T. 822,000; mohair, £ T. 767,000; opium, £ T. 752,000; oak galls, £ T. 578,000; cotton, £ T. 563,000; wool, £ T. 540,000; hides and leather, £ T. 498,000; coffee, £ T. 439,000; grain and flour, £ T. 370,000; olive oil, £ T. 349,000; sesame, £ T. 305,000; carpets, £ T. 277,000; drugs and colors, £ T. 262,000; figs, £ T. 251,000; dates, £ T. 233,000; animals, £ T. 220,000; nuts, £ T. 211,000; seeds, £ T. 189,000; oranges and lemons, £ T. 163,000. The imports from and exports to various countries in the financial year 1897 were in value as follow:

COUNTRIES.	Imports.	Exports.
Great Britain.....	£ T. 8,567,740	£ T. 6,813,160
France.....	2,100,940	4,606,650
Austria-Hungary.....	4,202,990	1,496,780
Russia.....	1,752,300	882,770
Italy.....	698,890	409,160
Roumania.....	675,540	220,880
Belgium.....	493,570	229,080
Greece.....	393,020	329,800
Persia.....	561,720	25,080
Egypt.....	649,170	.....
Germany.....	209,140	269,640
Netherlands.....	175,040	374,620
United States.....	24,860	289,220
Tunis.....	22,500	30
Other countries.....	140,170	52,860
Total.....	£ T. 21,359,710	£ T. 15,428,460

Navigation.—The number of vessels entered and cleared at Turkish ports in 1898 was 173,739, of 34,653,457 tons, of which 39,680 were steamers, of 32,446,320 tons, and 134,059 were sailing vessels, of 2,207,137 tons. The merchant navy in 1900 comprised 177 steamers, of 55,983 tons, and 2,205 sailing vessels, of 141,055 tons.

Foreign Relations.—On March 5, 1900, an *irade* announced an increase in the customs duties from 8 to 11 per cent. ad valorem. The powers at once lodged a protest declaring that no such change could be made without a previous understanding with all the powers concerned. The reply made by the Porte was a circular note simply stating that the increase of duty would take effect on May 14. On March 27 the ambassadors presented another collective note reiterating with emphasis their previous declaration that the customs duties are unalterable except with the consent of the powers. To this the Porte replied on April 5 in a note defending the proposed increase upon the grounds of the long delay in concluding the new commercial treaties and the extreme financial pressure from which the treasury was suffering. It described the new tariff as simply provisional in character, and pointed out that the duties imposed were lighter than those which the commercial treaties that were being negotiated sanctioned. In these circumstances the hope was expressed that the powers would not insist on their objections. The ambassadors on April 7, while maintaining their previous declarations, invited the Porte to formulate proposals to be forwarded to their respective governments. The Porte answered by a circular intimating an intention to adhere to its resolution to raise the ad valorem duties to 11 per cent. on May 14. The ambassadors thereupon warned the Porte in a collective note that it alone would have to assume responsibility for the serious consequences that must follow from the action it proposed to take. On June 20 the Porte requested a reply to its proposals, having refrained from putting its decree into execution.

The United States minister, after the Sultan had made three distinct promises to pay the in-

demnity long overdue on account of the destruction of missionary property during the Armenian disturbances, made an urgent demand for satisfaction in April. On June 23 an immediate reply to the demand of the United States Government was requested. After further correspondence the Sultan renewed his personal promise to pay the indemnities claimed, amounting to nearly \$100,000, and evinced his good disposition by ordering the rebuilding of the American college at Harput.

The Russian Government secured an *trade* granting to Russian subjects the exclusive right to build railroads in the districts of Asia Minor fronting on the Black Sea. The Russian ambassador called attention to serious conditions existing in Armenia. A renewal of the oppression of Armenian Christians by officials and of acts of violence on the part of the Kurds led to the resignation of the Armenian Patriarch in March when he could obtain no satisfaction. The difficulty that led to his resignation was in connection with the election of the Catholics of Sis. His first protest extracted an *trade* ordering the cessation of the difficulties exceptionally created in regard to the Armenians; the preservation of the rights of the patriarchate over all the Armenians in Turkey, including the election of the Catholics of Sis; and the remission of the military tax arrears in the case of Armenians who have suffered misfortunes, and the granting of facilities for the payment of the tax in future. A note from the Russian ambassador called attention to persecutions in certain districts which drove Armenians to emigrate to Russia, and he informed the Porte of the decision of the Russian Government to insist upon the repatriation of those Armenians having a trade or profession who took refuge in Russian territory at the time of the great Armenian exodus, their number being estimated at 2,000. In July some of the inhabitants of the Armenian village of Spaghank, in the Sassun district, were massacred and in adjacent villages persons were killed. The French vice-consul at Van, and shortly afterward the English vice-consul also, were attacked by Kurdish robbers. The Military Governor of Bitlis was dismissed, and in response to representations of the powers the Sultan ordered a commission to investigate the Spaghank affair.

In February the Sultan ordered a clause to be added to the mining law restricting or prohibiting the acquisition by foreigners of further interests in Turkish mines. To this the ambassadors collectively objected, declaring that it contravened existing treaties. In July a project of law was approved reserving to the Crown an option on all

newly discovered mines and prohibiting concessions until that option is declared. Difficulties that arose over the conclusion of a consular convention with Greece the Greek Government proposed to refer to the ambassadors for arbitration, appealing to the stipulations of the treaty of peace between Greece and Turkey. In negotiating new commercial treaties the Porte desired to secure the right for Ottoman subjects to enjoy the same treatment abroad that is obtained for the subjects of other powers in Turkey. To this both France and Russia objected, basing their contention on the capitulations, and hence negotiations with those powers were interrupted in July. The period of two years assigned to the conclusion of a treaty of commerce with Greece expired on Jan. 14, 1900, and the provisional state of affairs was prolonged for six months. When that period expired the Porte imposed differential tariffs on imports from Greece and also from Roumania, Servia, Montenegro, and Bulgaria, raising the duties on certain articles 30 or 40 per cent. The object of these prohibitory provisional rates was to force the Balkan countries to conclude new commercial rates favorable to Turkey. The Greek Government appealed to the three protecting powers, calling attention to an article in the London protocol of Feb. 3, 1830, which assures to Greek and Turkish subjects reciprocally the commercial rights accorded by either nation to the subjects of other powers. The Balkan states also protested, but could not lay claim to rights under the capitulations. Greece and Roumania refused to open negotiations for commercial treaties unless the differential tariff was repealed. A commercial treaty with Germany was already concluded before the beginning of 1900. This and the other new treaties that were under consideration substituted specific for ad valorem duties, and were calculated to yield an increase of £ T. 750,000 in the customs revenue.

The financial embarrassments of the Government led to the imposition of a supplementary tax of 6 per cent. on the Mohammedan peasantry, which the arbitrary methods of the farmers of the revenue made unendurable in some of the most productive provinces of the empire. The discontent of the farming population drew forth suggestions and demands for thoroughgoing reforms, not from the Young Turkish party alone, but from officials in the diplomatic and civil service. Mohammedan peasants were leaving their lands uncultivated, cutting down their vines and trees, and even emigrating in great numbers beyond the seas. Of 100,000 Syrian emigrants to the United States, fully a third were Mussulmans.

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UNITARIANS. The annual report of the American Unitarian Association for 1900 gives the number of churches of this denomination as 457, while in 1850 it was 251. The average increase in the number of churches in fifty years had therefore been about 4 a year, or the total increase in fifty years nearly 90 per cent. Fifty-two churches that were on the list in 1850, or one fifth of the whole number, had disappeared from it in 1900.

The association had \$631,936 of property and more than \$400,000 of invested funds, yielding an income of \$16,915. It had, further, a Church Building Loan fund of \$148,821. Eighty-three churches were on the beneficiary list, receiving \$30,004 in all, or an average of more than \$360 each. For the home mission purposes of the as-

sociation \$11,002 were required, and for the foreign missions \$4,950.

American Unitarian Association.—The seventy-fifth annual meeting of the American Unitarian Association was held in Boston, Mass., May 22. President Samuel Eliot, of Harvard University, Cambridge, Mass., was chosen president. The report of the secretary showed that the number of churches contributing to the association had risen from 319 to 343, and the number of delegate societies from 233 to 304. The gifts of churches and individuals for current expenses had aggregated \$75,329, against \$57,513 in the previous year, and the gifts and bequests for capital account had amounted to \$59,552, against \$39,592 in 1899. The development of new sources of income, such as Sunday schools and Young People's Unions, had

added to the contributions. In the publication department, activity of the post office mission was mentioned; the free tract list contained 195 tracts, of which nearly 300,000 copies had been circulated during the year; a new, tenth series, to comprise sermons of earlier leaders of the Unitarian movement, had been inaugurated with the aid of the income of the Edward Wigglesworth fund; free copies of various publications had been furnished to ministers, divinity students, colleges, libraries, and reading rooms; the issuing of books and tracts in foreign languages was contemplated, and other means of extending the work of the publication department were considered. The Japanese mission had drawn to its allegiance a number of native leaders of power and repute, and was regarded as one of the most prophetic forces in Japanese life. Its cost had been largely reduced during the past six years—from \$10,021 in 1894 to \$4,300 in 1899; and during the present year it had been transferred to native control. A steady advance in activity and efficiency had marked the work of the home mission department. The restoration of the system of superintendents had been made possible by increased income, and four field officers were engaged in service. The foundation of the Hackley School, at Tarrytown, N. Y., was mentioned as one of the most important new enterprises of the year. It started with \$150,000 of real estate and funds, given by Mrs. C. B. Hackley, to which Mrs. Goodhue, of New York, had added \$40,000 for the Goodhue Memorial Building.

A joint meeting of committees of the association and of the Universalist General Convention had been held Jan. 22, to consider the subject of closer co-operation. Premising, as it declared, that no disturbance of the separate organic autonomy of the two denominations was desired or expected, and that co-operation, not consolidation; unity, not union, were sought, the meeting decided upon the constitution of a permanent conference committee of five representatives from each body, the members of the committee to be appointed for two years. It was made the duty of this committee to consider cases in which the two denominations are jointly interested, such as opportunities of instituting churches or missions in new fields, circulation of tracts (literature), or other endeavors to promote matters of common agreement; and to consider all cases of conflict of interest, duplication of missionary efforts, or other occasions of friction between the representatives of the two bodies, and recommend appropriate action to the church, conference, or missionary board having jurisdiction in the case. The conference recommended that whenever local conditions permit, the ministers and the churches of the two denominations hold occasional joint meetings for the purpose of aggressively and positively urging upon the people the principles of Christian faith and life. In order to put this plan into immediate operation, the directors of the American Unitarian Association and the trustees of the Universalist General Convention were requested to authorize the members of the conference committee to discharge the functions described in the plan of co-operation until such time as their successors should be appointed. On the presentation of this report of the conference committee in its meeting the association approved and adopted the recommendations contained in it, voted a message of greeting to the Universalist General Convention, and requested the Unitarian representatives on the committee to discharge the duties imposed in it for the term of one year. The resolutions on church membership adopted by the last national conference were

recommended to the churches and the people, and a committee was appointed to collect and codify the church covenants and statements of faith now in use, "to the end, first, that any church may be assisted in forming some basis of membership for its followers; and, second, that some wise system of presenting and teaching our faith to the young may be devised." Representatives of Hungarian, English, German, French, Indian, Japanese, and Icelandic Unitarians addressed the meeting.

Sunday-school Society.—The seventy-third anniversary meeting of the Unitarian Sunday-school Society was held in Boston, Mass., May 24.

The report of the Unitarian Temperance Society, made to the annual meeting in Boston, May 21, dealt largely with the circulation of tracts. The accounts of the society showed a balance on hand of \$660, besides the Richard Clap Weis fund of \$1,000 with accrued interest.

British Triennial Conferences.—The seventh Triennial Conference of members of "Unitarian, Liberal Christian, Free Christian, Presbyterian, and other nonsubscribing or kindred congregations" of England was opened at Leicester, March 29. Mr. W. Blake Odgers, Q. C., of Winchester, presided, and spoke in his opening address in memory of the Rev. Dr. James Martineau, deceased. A resolution commemorative of Dr. Martineau was also unanimously carried at the business meeting of the Conference, and an address concerning him was made by the Rev. Stopford A. Brooke. The meetings were chiefly devoted to the discussion of various topics bearing upon the objects of the Conference, presented in papers on How Best to Organize the Religious Life of our Young People, by Mr. H. P. Greg; The Future Supply of our Ministers, by Mr. A. H. Worthington; The Fear of God and the Sense of Sin, by the Rev. P. H. Wicksteed; and Gospel Interpretation, by Mrs. Humphry Ward. The reading of these papers was followed by voluntary addresses.

British and Foreign Unitarian Association.—The seventy-sixth annual meeting of the British and Foreign Unitarian Association was held in London, June 5 and 6. Mr. C. W. Jones presided. The income for the year had been £4,825 from subscriptions, interest, and sales of books and pamphlets, and £934 in dividends from the McQuaker fund, of which £2,494 had been granted for home and £292 for foreign missions, and about one fifth of the amount had been spent upon publications, about 20,000 copies of which had been granted. Some large bequests had been received, including one of £3,000 (less duty) from the late Mr. Charles Cochrane. The year was represented to have been one of increased activity. The work of the Rev. Stopford A. Brooke as special preacher for the association had quickened religious thought and life in every town visited by him. Among the new features of the propagandist work, movements in New Zealand and Copenhagen, Denmark, were mentioned. The usual grants had been made for work in parts of India, and support of the Brahmo Somaj movement was recommended as the best method of aiding the spread of liberal religion among the populations of that country. The McQuaker trustees had offered a scholarship of £100 a year at Manchester College, Oxford, for Scottish graduates willing to take up the Unitarian ministry in Scotland. Meetings of the Sunday-school Association and conferences of Sunday-school delegates and of Postal Mission workers were held in connection with the anniversaries.

Reports to the British Unitarian Association from 285 Sunday schools gave the number of teachers as 3,747, and of pupils as 33,799, of whom 8,321 were upward of sixteen years of age.

UNITED BRETHREN CHURCH. The Church of the United Brethren in Christ returned 243,841 members for 1900, against 202,474 in 1899.

The year's receipts of the Beneficiary Education fund were \$1,884 from the annual conference assessments and \$2,514 from beneficiaries. At the annual meeting of the Board of Education, May 8, all the presidents of the colleges and the president of the seminary of the Church were made a committee to prepare a paper to be presented to the next General Conference, setting forth the needs and demands of the educational work, including the election of a general educational secretary.

Union Biblical Seminary reported 53 students enrolled, with 35 members of the Mission Study Class and 9 members of the Volunteer Student Band. The indebtedness of the institution had been reduced \$7,079 during the year, and \$16,825 since the last General Conference, leaving the present amount \$37,602, upon three fourths of which the rate of interest had been lowered.

The Historical Society took steps at its annual meeting to have a manuscript prepared to be deposited in its collections, containing an account of the events of interest that had occurred in the Church during the past twenty-five years.

The treasurer of the Church Extension Society reported, April 18, that the receipts for the year had exceeded \$23,000, and the expenditure had been about \$15,000, leaving a balance of more than \$8,000 in the treasury. Since the society was organized more than \$13,000 had been collected on outstanding debts from 68 churches, 23 mortgages had been released, and loans amounting to \$125,000 had been made to 110 churches. The amount of new loans for the current year was \$12,350, and more than \$8,000 in new funds had been collected. The Weaver Memorial fund had reached \$4,500, and loans had been made from it to 9 churches.

The receipts of the publishing house for the year ending April 2 from current business were \$204,561; its profits were \$20,012; its net assets on April 1 were \$308,876, showing a gain during the year of \$6,035; and its indebtedness, which was more than \$72,000 in December, 1897, had been reduced to \$13,082. All the periodicals showed increase in circulation.

The Board of Missions met at Lebanon, Pa., April 19, Bishop Kephart presiding. The treasurer reported that the total receipts from all sources had been \$82,992, of which about \$39,000 were classed as "new funds." Adding a balance of \$10,039, which was on hand at the beginning of the year, the total resources of the society had been \$93,031. "Commendable progress" was reported in most of the home missions. The work in Germany consisted of 11 missions, 18 organized churches, 12 missionaries, 988 members, and church property valued at about \$42,000. The mission in Japan, begun in 1895, had 16 meeting places, 118 members, and 8 Sunday schools with 13 teachers and 183 pupils. Thirty-four members had been added during the year. The stations in Africa, which had been nearly destroyed during the outbreaks of the natives, were undergoing reorganization. They returned 12 native workers, services held in 75 towns with an attendance of 45,000 persons, 3 Sunday schools with 204 pupils, and 7 day schools with 320 pupils. The present value of church and meeting-house property was \$9,850. The total annual expenditure of the mission was \$4,597. A new mission was starting in Porto Rico. The interests of the Twentieth Century fund, the amount to be raised for which was fixed at \$50,000, were considered at the meeting. The Woman's Missionary Board had received \$30,665 during the year.

United Brethren Church Old Constitution.—This body consists of those churches and members which refused to acquiesce in certain amendments to the constitution and doctrinal statement of the Church adopted by the General Conference of 1889 (see Annual Cyclopædia for 1889, page 800), claiming that the action of the Conference was illegal and subversive of important testimonies. It returns 26,643 members for 1900, against 22,807 in 1899.

UNITED EVANGELICAL CHURCH. This Church returns for the year ending June 1, 1900, 478 itinerant preachers; 202 local preachers; 60,993 members, showing an increase of 1,250 over the previous year; 5,441 members received by confession of faith (included in the number already given); 1,217 adults and 2,618 infants baptized during the year; 785 Sunday schools, with 11,170 officers and teachers and 76,718 pupils; 420 senior societies of the Keystone League of Christian Endeavor and 29 affiliated societies, with 12,552 active and 2,436 associate members; 120 junior societies, with 2,834 active and 1,397 associate members; 64 auxiliary societies, with 3,643 members; 763 church buildings, valued at \$1,880,140; and 101 parsonages, valued at \$223,907. The amounts of collections for the year were: For missions, \$60,336; for conference claimants, \$3,870; for conference expenses, \$366; for the Sunday School and Tract Union, \$357; for education, \$4,443; for church extension, \$3,100; for salaries of bishops, \$2,842; for the Charitable Society, \$503; and for building and repairing churches and parsonages, \$155,722.

The receipts for the Board of Missions were reported at its annual meeting, held in Harrisburg, Pa., in October, to have been \$27,636, of which \$18,865 were on the account of the general treasury, \$5,724 of the Woman's Missionary Society, and \$3,047 of the Foreign fund. The expenditures had been \$17,217. In addition to these sums the receipts of the annual conferences for missions had been \$35,181, and their expenditures \$43,906, making the totals for the denomination \$62,817 of receipts and \$61,123 of expenditures. Appropriations were made for the coming year of \$57,538. All the arrangements had been made for the establishment of a mission in China, and the designated superintendent of the work, the Rev. C. N. Dubs, was ready to go when the plans were interrupted by the breaking out of the "Boxer" disturbances. The board, deeming it desirable for the superintendent to be on the field ready to avail himself of any opportunities that might offer for entering it, directed Mr. Dubs to proceed with his family to China as soon as possible. (He sailed for China a few weeks afterward.) A twentieth century offering for foreign missions was determined upon, to which each person in the Church was invited to contribute 20 cents.

UNITED STATES OF AMERICA, a federal republic in North America. The legislative power is vested in the Congress, consisting of the Senate and the House of Representatives. There are 90 Senators, 2 from each State, elected by the State Legislatures for six years, one third being renewed every two years. The House of Representatives has 357 members on the basis of the census of 1890, elected by the ballots of all the qualified voters of the several States, which are subdivided into congressional districts containing each approximately 173,000 inhabitants. The executive power is vested in the President, who is commander in chief of the military and naval forces, has a power of veto over acts of Congress, which can be overcome by a vote of two thirds of each house, and is empowered to make treaties, subject

to the ratifying vote of the Senate. The Vice-President is President of the Senate, and in case of the death, resignation, or removal of the President he succeeds the latter for the remainder of the term. In case of the death or disability of both President and Vice-President, the Secretary of State becomes acting President, and after him other members of the Cabinet in their order. The Senate, sitting as a high court, can remove the President or members of the Cabinet on articles of impeachment presented by the House of Representatives. The members of the Cabinet, who are the heads of the eight administrative departments, are appointed by the President, as well as all other executive officers, but his appointments must be confirmed by the Senate. The President and Vice-President are chosen by a college of electors, who are chosen in each State in the manner that the Legislature prescribes, which is in every State by popular suffrage, their number being equal to the sum of the Senators and Representatives of the State. It is the custom of political parties to nominate in national convention their candidates for the presidency and vice-presidency, and the electors, who are chosen by each State on a collective ticket, are accustomed to vote solidly for the candidates designated by their parties beforehand. Thus the election of the President and Vice-President has come to be in fact, though not in form, by the direct vote of the nation. The term of the presidency is four years, and elections are held on the Tuesday following the first Monday in November of every leap year. The President-elect is sworn into office by the Chief Justice on March 4 of the year after his election. The President for the term ending March 4, 1901, was William McKinley, of Ohio, and the Vice-President was Garret A. Hobart, of New Jersey. The Cabinet at the beginning of 1900 was composed as follows: Secretary of State, John Hay, of the District of Columbia; Secretary of the Treasury, Lyman J. Gage, of Illinois; Secretary of War, Elihu Root, of New York; Secretary of the Navy, John Davis Long, of Massachusetts; Postmaster-General, C. Emory Smith, of Pennsylvania; Secretary of the Interior, Ethan Allen Hitchcock, of Missouri; Secretary of Agriculture, James Wilson, of Iowa; Attorney-General, John William Griggs, of New Jersey.

Area and Population.—The area of the States and Territories and their population according to the census of 1900 are given in the table above.

Excluding the Indians of the Indian Territory, the population is 75,965,397. The population of Hawaii is 154,001, making the total for the States and Territories 76,304,799, not including Porto Rico, Tutuila, Guam, and the Philippine and Sulu Islands, which have an aggregate area of about 120,000 square miles and 10,000,000 population. Counting only the land surface, and not inclosed waters, the area of the States and Territories, exclusive of Alaska and transmarine possessions, is 2,970,038 square miles. Rhode Island has 394.98 inhabitants to the square mile; Massachusetts, 348.92; New Jersey, 252.67; Connecticut, 187.48; New York, 152.63; Pennsylvania, 140.09; Maryland, 120.89; Ohio, 102; Delaware, 94.25; Illinois, 86.10; Indiana, 70.08; Kentucky, 53.68; Tennessee, 48.40; Virginia, 46.21; New Hampshire, 45.71; Missouri, 45.20; South Carolina, 44.43; Michigan, 42.16; Iowa, 40.23; North Carolina, 38.98; West Virginia, 38.90; Wisconsin, 38; Vermont, 37.62; Georgia, 37.58; Alabama, 35.48; Mississippi, 33.48; Louisiana, 30.42; Arkansas, 24.73; Hawaii, 23.88; Maine, 23.23; Minnesota, 22.11; Kansas, 18; Nebraska, 13.91; Indian Territory, 12.64; Texas, 11.62; Oklahoma, 10.26; Florida, 9.74; California,

STATES AND TERRITORIES.	Square miles.	POPULATION,	
		1890.	1900.
Maine.....	33,040	661,066	694,466
New Hampshire.....	9,305	376,530	411,688
Vermont.....	9,565	332,422	343,641
Massachusetts.....	8,315	2,238,343	2,806,346
Rhode Island.....	1,250	845,506	428,556
Connecticut.....	4,900	746,258	906,255
New York.....	49,170	5,997,353	7,268,012
New Jersey.....	7,815	1,444,383	1,883,669
Pennsylvania.....	45,215	5,258,014	6,302,115
Delaware.....	2,060	168,493	184,735
Maryland.....	12,210	1,042,390	1,190,050
District of Columbia.....	70	230,392	278,718
Virginia.....	42,450	1,655,980	1,854,184
West Virginia.....	24,780	762,794	968,800
North Carolina.....	52,250	1,617,347	1,893,810
South Carolina.....	30,570	1,151,149	1,340,310
Georgia.....	59,475	1,837,353	2,216,381
Florida.....	58,580	391,422	528,542
Ohio.....	41,080	3,672,316	4,157,545
Indiana.....	36,350	2,192,404	2,516,462
Illinois.....	56,650	3,826,351	4,281,550
Michigan.....	58,915	2,093,889	2,420,982
Wisconsin.....	56,040	1,686,980	2,069,042
Minnesota.....	88,365	1,301,326	1,751,394
Iowa.....	56,025	1,911,496	2,231,853
Missouri.....	69,415	2,679,184	3,106,665
North Dakota.....	70,795	182,719	319,146
South Dakota.....	77,650	328,406	401,570
Nebraska.....	77,510	1,058,910	1,068,589
Kansas.....	82,080	1,457,496	1,470,495
Kentucky.....	40,400	1,858,335	2,147,174
Tennessee.....	42,050	1,767,518	2,020,616
Alabama.....	52,250	1,513,017	1,828,697
Mississippi.....	46,810	1,289,000	1,551,270
Louisiana.....	48,720	1,118,587	1,381,625
Texas.....	265,780	2,335,523	3,048,710
Oklahoma.....	39,030	61,334	398,245
Arkansas.....	53,850	1,128,179	1,311,564
Montana.....	146,060	132,159	243,329
Wyoming.....	97,890	60,705	92,531
Colorado.....	108,925	412,196	539,700
New Mexico.....	122,580	153,693	195,310
Arizona.....	113,080	59,620	122,981
Utah.....	84,970	207,905	276,749
Nevada.....	110,700	45,761	42,335
Idaho.....	84,800	84,385	161,772
Washington.....	69,180	349,390	518,108
Oregon.....	96,030	313,767	413,536
California.....	158,360	1,206,130	1,485,053
Alaska.....	590,884	22,062	63,481
Indian Territory.....	31,400	180,182	291,980
Total.....	3,616,484	63,069,756	76,087,357

9.52; Washington, 7.75; South Dakota, 5.23; Colorado, 5.21; North Dakota, 4.55; Oregon, 4.37; Idaho, 1.92; Montana, 1.67; New Mexico, 1.59; Arizona, 1.09; Wyoming, 0.95; Nevada, 0.39; Alaska, 0.11.

Immigration.—The number of immigrants arrived in the United States in 1900 was 448,572, against 311,715 in 1899. The total number of arriving passengers in 1900 was 594,478, of whom 120,477 were United States citizens returning and 25,429 were nonimmigrant aliens. The immigration was 22.58 per cent. of the total increase of population in 1900. The total immigration from 1821 to 1899 was 19,050,328, of whom 7,014,793 were from the British islands, 5,079,362 from Germany, 1,252,051 from Sweden and Norway, 1,049,315 from British America, 957,783 from Italy, 935,885 from Austria-Hungary, 841,828 from European Russia, 403,715 from France, 312,599 from China, 206,380 from Switzerland, 195,662 from Denmark, 132,808 from the Netherlands, 124,261 from the West Indies, 69,111 from Spain and Portugal, 64,323 from Belgium, 55,015 from Asiatic countries other than China, 35,437 from minor European countries, 33,542 from Australia and Polynesia, 27,544 from Mexico, 14,144 from South America, 2,909 from Central America, and 1,869 from Africa. Of the immigrants who arrived in 1899, Italy sent 77,419, Austria-Hungary 62,491, Russia 60,982, Great Britain and Ireland 45,181, Sweden and Norway 19,502, Denmark 2,690, Spain

and Portugal 2,439, France 1,694, Switzerland 1,326, Netherlands 1,029, Belgium 1,101, the rest of Europe 4,019, China 1,660, the rest of Asia 7,312, the West Indies 2,585, British America 1,322, Mexico 161, Central America 159, South America 89, Africa 51, and other countries 1,027. Of the immigrants in 1900, 114,847 came from Austria-Hungary, 1,196 from Belgium, 2,926 from Denmark, 1,739 from France, 18,507 from Germany, 3,771 from Greece, 100,135 from Italy, 1,735 from the Netherlands, 9,515 from Norway, 4,234 from Portugal, 6,459 from Roumania, 90,787 from Russia, 355 from Spain, 18,650 from Sweden, 1,152 from Switzerland, 235 from European Turkey, 48,237 from the United Kingdom (of whom 9,951 were from England, 35,730 from Ireland, 1,792 from Scotland, 764 from Wales, and 110 not specified), 396 from British America, 237 from Mexico, 42 from Central America, 4,656 from the West Indies, 124 from South America, 1,247 from China, 16,699 from other parts of Asia, 30 from Africa, and 441 from all other countries.

Education.—The estimated number of children in the United States between the ages of five and eighteen was 21,572,114 in 1898. The number of enrolled pupils in the public schools was 15,103,874; the average attendance, 10,356,458; average duration of school, 143 days. There were 410,813 teachers—132,257 men and 278,556 women—receiving in salaries the aggregate sum of \$124,192,270 out of a total expenditure of \$194,292,911 on the public schools of all the States and Territories. In 1899 the total population of school age was estimated at 21,830,774; enrollment of public schools, 15,138,715; average attendance, 10,389,407; average duration of school, 143.2 days; number of teachers, 415,660, comprising 131,793 male and 283,867 female teachers; salaries of superintendents and teachers, \$128,662,880; total expenditure, \$197,281,603. The number of public high schools in 1899 was 5,495, with 9,239 male and 9,479 female teachers and 197,127 male and 279,100 female pupils. The number of private secondary schools was 1,957, with 3,940 male and 5,470 female teachers and 51,900 male and 51,938 female teachers. The number of public normal schools was 166, with 839 male and 1,218 female teachers and 11,543 male and 33,265 female pupils; and the number of private normal schools was 165, with 633 male and 403 female teachers and 11,829 male and 11,743 female pupils. The number of universities and colleges, both coeducational and for men only, was 484, with 8,209 male and 1,679 female professors and instructors and 31,156 male and 15,071 female preparatory, 54,760 male and 17,757 female collegiate, and 3,707 male and 1,191 female graduate students. The total income of these institutions was \$20,242,039. The number of colleges and seminaries for women which confer degrees was 145, with 673 male and 1,768 female professors and instructors and 5,089 preparatory, 14,985 collegiate, and 474 graduate students; total income, \$3,236,416. The number of schools of technology and schools conferring the degree of bachelor of science was 43, with 1,116 male and 100 female professors and instructors and 2,357 male and 732 female preparatory, 8,858 male and 1,279 female collegiate, and 180 male and 60 female graduate students. The number of theological seminaries was 163, with 996 instructors and 8,261 students; number of law schools, 96, with 906 instructors and 11,874 students; number of medical colleges, 151, with 4,389 instructors and 23,778 students.

The Army.—The strength of the regular army as provided in the army reorganization bill approved on March 2, 1899, is 2,587 officers and 65,000 enlisted men, of whom 581 officers and 2,093

men are attached to the general staff, 1,177 officers and 34,450 men compose 25 regiments of infantry, 472 officers and 12,340 men 10 regiments of cavalry, 357 officers and 11,970 men 7 regiments of artillery, 752 men are in 5 companies of engineers, 720 men in the signal corps, 2,600 in the hospital corps, and 75 are Indian scouts. Each infantry regiment contains 3 battalions of 4 companies. The weapon is the Krag-Jørgensen magazine rifle of 30 caliber. The cavalry regiment consists of 3 sections of 4 troops of 100 men each. The cavalymen are armed with the saber, the Krag-Jørgensen carbine of 30 caliber, and the Colt revolver of 38 caliber. There are 2 infantry and 2 cavalry regiments composed of negroes with white officers. The artillery consists of 84 foot and 14 mounted batteries of 6 pieces, the guns having the caliber of 3.2 inches. The regular army is recruited by voluntary enlistment for three years. All citizens capable of bearing arms are liable to be called to arms in war time, between the ages of eighteen and forty-five. The organized militia, which is required to drill once or twice a week, especially in winter, numbered 7,521 officers and 98,818 men in 1899. There were 328 cavalry officers and 4,155 men, 391 artillery officers and 5,068 men, 5,918 infantry officers and 87,894 men, and 884 other officers and 1,701 men. The male population available for the defense of the country is estimated at 10,149,184. The regular army officers are 1 lieutenant general, 6 major generals, 16 brigadier generals, 77 colonels, 98 lieutenant colonels, 271 majors, 813 captains, 777 first lieutenants, and 532 second lieutenants. The President was authorized in 1899 to raise a volunteer force of 35,000 men organized in 27 infantry and 3 cavalry regiments. There were 24 regiments of infantry enlisted for service in the Philippines, having a strength of 1,200 officers and 31,416 men, and 1 regiment of cavalry consisting of 50 officers and 1,234 men. A regiment of natives of Porto Rico has 31 officers and 400 men. Native troops have been raised in the Philippines, including a squadron of cavalry. The Hawaiian regiment has 407 men. The strength of the regular army at the end of 1899 was 405 cavalry officers and 12,083 men, 322 artillery officers and 10,978 men, 1,078 infantry officers and 35,428 men, and 497 officers in the general staff, signal corps, hospital and ambulance corps, naval brigade, cadet corps, etc., and 9,732 men; total, 2,302 officers and 68,221 enlisted men. At the end of 1900 the total strength of the United States military forces was 103,150 men, 2,534 officers and 68,221 enlisted men in the regular establishment, and 1,548 officers and 31,079 enlisted men of the volunteer service. Under the act of March 2, 1899, the volunteer force was to be discharged and the regular army reduced to 2,447 officers and 29,025 enlisted men by June 30, 1901. The garrison in Porto Rico was reduced before the close of 1900 to 1,036 men, including 879 native troops. In Cuba there were nearly 6,000 troops, and in the Philippines nearly 60,000 men. Secretary Root proposed to recruit a force not to exceed 12,000 men among the natives of the Philippine Islands, to be organized and commanded by officers of the regular army, some of the lieutenantcies to be given to such natives as show fitness for command. A regiment of Porto Ricans also is authorized. The Secretary of War and Lieut.-Gen. Miles both recommended a permanent army of 100,000 men. An artillery corps is to be organized, divided into coast artillery and field artillery.

The Navy.—The battle ships Oregon, Massachusetts, and Indiana, launched in 1893, of 10,253 tons, are protected above and below the water line for over half their length by a belt of 18-inch

armor, and by an armored deck and armored redoubts in front of the machinery, and the 4 13-inch 35-caliber guns in the fore and aft turrets and 8 8-inch guns in 4 other turrets are protected by inclined armor. These vessels were designed to make over 16 knots, and the Iowa, of 11,410 tons, launched in 1896, carrying 12-inch guns, to go 17 knots. In the Kearsarge and Kentucky, of 11,525 tons, the armor belts are 16½ inches thick, the great guns are of 13-inch bore, and on their turrets are superposed the turrets for the 4 8-inch guns. The Alabama, Illinois, and Wisconsin differ from these in having no 8-inch guns, but 14 6-inch instead of the 5-inch guns carried by the others, besides the 20 quick-firing 6-pounders, which all these turret ships have. The Maine, Missouri, and Ohio have a displacement of 12,500 tons, with armor 12 inches thick and 12-inch guns, engines of 16,000 horse power instead of 10,000, since large coal endurance and a speed of 18 knots are the objects sought. The Georgia, New Jersey, and Pennsylvania will displace 13,500 tons, will have for the main armament 4 12-inch and 16 6-inch guns, and will be able with 16,000 horse power to make at least 18 knots. The newer armored cruisers, like the battle ships, are larger than their predecessors, as in other navies. In the armored cruiser Texas, displacing 6,315 tons, 2 12-inch guns are mounted singly in turrets protected by an oblique redoubt, and there are 6 6-inch and 12 quick-firing 6-pounders; and in spite of her heavy armament and armor plates 12 inches thick the vessel, which was launched in 1892, can make nearly 18 knots. The cruiser New York, launched in 1891, having a displacement of 8,200 tons, engines of 17,500 horse power, giving a speed of 21 knots, and in addition to 10-inch side plating a strong curved steel deck, carries 8-inch guns in pairs in the fore and aft turrets and 1 on each beam, with a secondary armament of 12 4-inch and 8 other quick firers. The Brooklyn, launched in 1895, displaces 9,215 tons, having 15-inch plates and an armament of 8-inch guns disposed as in the New York, and 12 5-inch and 12 smaller quick firers, and could make nearly 22 knots with engines of 17,300 horse power. The California, Nebraska, and West Virginia displace 12,000 tons, carry 14 quick-firing 8-inch guns and 14 6-inch and 20 smaller ones, and are designed to make 22 knots an hour. All the new cruisers are sheathed and coppered. The second-class protected cruisers of 3,100 tons—the Chattanooga, Cleveland, Denver, Des Moines, Galveston, and Tacoma—to be armed with 10 5-inch quick firers, are smaller than the Albany and New Orleans, launched in 1899 and 1896, and even than the Cincinnati and Raleigh, just as these were lighter than the Olympia or the Newark, Philadelphia or San Francisco, and the latest vessels are not intended to make over 16½ knots. The newest type of monitor, the Arkansas, Connecticut, Florida, and Wyoming, of 3,235 tons, have 11-inch armor, 2 12-inch guns, 4 4-inch and 3 more quick firers, and a speed of 12 knots. The fastest vessels in the navy are the unarmored cruisers Columbia and Minneapolis, built in 1892 and 1893, displacing 7,375 tons, and carrying 1 8-inch gun and 22 quick firers of various sizes, have triple-expansion engines of 18,500 horse and 20,800 horse power, enabling them to steam 23 and 22 knots respectively. There were at the end of 1899 in the effective navy 9 first-class battle ships, 6 not completed and 1 of the second class; 19 good coast-defense vessels, besides the 4 new monitors; 1 armored ram, Admiral Ammen's Katahdin, which can be submerged excepting the turtle deck and the well-armed funnel and ventilating shafts when she is making an attack; 2 armored cruisers,

and 3 building; 15 protected cruisers, and 6 under construction; 3 commerce destroyers; 17 gunboats, and 1 building; 16 torpedo-boat destroyers under construction; and 24 completed and 13 not yet completed torpedo boats.

Pensions.—The number of pensioners on the rolls in the year ending June 30, 1900, was 993,529, of whom 752,510 were invalids and 241,019 widows and dependents. The disbursements during the year amounted to \$138,462,130, of which \$9,828,525 were first payments and \$128,633,605 other pensions. Under the general pension law the total number of 878,332 claims of invalids and 534,721 of widows, etc., had been filed up to June 30, 1900, and 586,521 claims of invalids and 332,029 of widows, etc., allowed. Under the act of June 27, 1890, there had been 847,327 applications of invalids and 338,488 of widows, etc., filed, and 451,531 claims of invalids and 181,262 of widows, etc., allowed. The new applications during the year were 2,753 for invalids and 7,593 for widows, etc., under the general law, and 10,940 for invalids and 338,488 for widows, etc., under the act of 1890, and the claims allowed were 1,690 for invalids and 3,308 for widows, etc., under the general law, and 21,345 for invalids and 12,173 for widows, etc., under the act of 1890. There were 7 applications of widows of soldiers of the War of 1812, and 1 was allowed, the total number allowed up to date having been 25,713 for survivors and 35,480 for widows; of survivors of the war with Mexico, 69 filed claims and 497 widows, while 21 claims of survivors and 420 of widows were allowed; of survivors of Indian wars, 26 made applications, and 196 widows, and the claims of 10 survivors and 144 widows were allowed. The number of applications arising out of the war with Spain was 12,038 for invalids and 1,383 for widows and dependent relatives, and the number of claims allowed was 801 for invalids and 710 for widows, the total granted in the two years since applications were first filed having been 926 for invalids and 888 for widows, etc., while the total number of applications was 27,047 for invalids and 3,934 for widows, etc. The applications from army nurses were 49 in number; claims allowed, 22.

Public Lands.—The total area of original homestead entries in 1900 was 8,478,409 acres, of which 1,853,090 acres were in North Dakota, 1,226,405 acres in Oklahoma, 477,523 acres in Minnesota, 456,855 acres in Nebraska, 446,518 acres in Arkansas, 439,814 acres in Oregon, 410,040 acres in South Dakota, 405,496 acres in Washington, 328,437 acres in Montana, 312,784 acres in Colorado, 296,398 acres in Idaho, 264,536 acres in California, 251,215 acres in New Mexico, 235,308 acres in Wyoming, 208,277 acres in Louisiana, 140,623 acres in Alabama, 127,563 acres in Florida, 123,604 acres in Mississippi, 119,750 acres in Missouri, 100,173 acres in Wisconsin, 60,160 acres in Utah, and 53,594 acres in Michigan. The railroad selections in 1900 amounted to 1,932,139 acres, of which 507,467 acres were in Wyoming, 347,625 acres in Kansas, 243,201 acres in Washington, 224,913 acres in Colorado, 204,888 acres in Oregon, 171,794 acres in California, 82,738 acres in Montana, 75,344 acres in Utah, and 44,034 acres in Idaho. The number of acres disposed of for cash under the homestead acts and timber culture acts or located with agricultural college and other kinds of scrip or with military bounty land warrants or selected by States or railroads was 13,391,464 acres, of which 1,869,792 acres were in North Dakota, 1,270,403 acres in Oklahoma, 1,157,088 acres in Montana, 995,982 acres in Wyoming, 842,015 acres in Oregon, 781,600 acres in Colorado, 772,034 acres in Washington, 643,082 acres in Minnesota, 576,779 acres in California,

492,017 acres in New Mexico, 466,738 acres in Arkansas, 464,726 acres in Utah, 461,674 acres in Nebraska, 460,976 acres in Idaho, 455,913 acres in South Dakota, 452,166 acres in Kansas, 232,057 acres in Louisiana, 203,881 acres in Missouri, 203,380 acres in Alabama, 149,727 acres in Mississippi, 114,352 acres in Wisconsin, 64,645 acres in Louisiana, 54,700 acres in Arizona, and 49,260 acres in Nevada.

Indians.—The Indian population on reservations in 1900 was 270,544, compared with 243,524 in 1890. There were 86,265 in Indian Territory, 40,189 in Arizona, 19,212 in South Dakota, 13,926 in Oklahoma, 11,431 in California, 10,726 in Wisconsin, 10,076 in Montana, 9,827 in Washington, 8,952 in Minnesota, 8,480 in New Mexico, 8,321 in Nevada, 8,276 in North Dakota, 7,557 in Michigan, 5,334 in New York, 4,063 in Oregon, 3,854 in Nebraska, 2,115 in Utah, 1,642 in Wyoming, 1,436 in North Carolina, 1,211 in Kansas, and 995 in Colorado, 575 in Florida, 385 in Iowa, and 290 in Texas. The births among Indians were 4,196 in 1900, against 4,863 in 1890; deaths, 3,698, against 5,218. The total area of Indian reservations in 1900 was 121,665 square miles, compared with 162,991 square miles in 1890, the Indian Territory having been reduced from 40,411 to 30,489 square miles, the area of Oklahoma from 20,770 to 6,884 square miles, that in South Dakota from 18,221 to 8,991 square miles, that in North Dakota from 9,158 to 5,784 square miles, that in New Mexico from 15,620 to 2,605 square miles, that in Montana from 16,549 to 14,845 square miles, that in Idaho from 3,552 to 2,132 square miles, the reservation of 1,710 square miles in Colorado having been abolished, the Minnesota reservation cut down from 3,523 to 2,447 square miles, the Oregon reservation from 3,242 to 2,031 square miles, and the one in Utah from 6,207 to 3,186 and that in Washington from 6,321 to 3,646 square miles, and in Wyoming from 3,660 to 2,828 square miles, while in Arizona the area has been increased from 10,317 to 23,673 square miles.

Patents.—The number of applications for patents during the year ending Dec. 31, 1900, was 41,980; caveats filed, 1,731; patents and reissues, 26,499; cash received, \$1,350,828; cash expended, \$1,260,019; surplus, \$90,808. The total number of first patents issued from 1852 to 1901 was 664,827; designs patented, 33,813; reissues of patents, 11,879; trade-marks registered, 35,678; labels registered, 8,009. From 1836 till 1852 the number of patents was 9,957. During the calendar year 1900 the issues of patents were 24,660 in number; of design patents, 1,758; reissues, 81; total, 26,499; trade-marks registered, 1,721; labels and prints, 830; total certificates, 2,551.

Commerce and Production.—The production of corn in the United States in the year ending June 30, 1900, was 2,078,143,933 bushels, of which 213,123,412 bushels were exported, or 10.30 per cent. of the crop, while 1,865,020,521 bushels and 2,480 bushels of imported corn, making a total of 1,865,023,001 bushels, were consumed in the United States. The wheat crop for the calendar year 1899 was 547,303,846 bushels, of which 186,096,762 bushels, or 34 per cent., were exported and 361,207,084 bushels were retained for consumption, the total domestic consumption, after adding 320,195 bushels of imports and deducting 297,359 bushels of foreign exports, having been 361,229,920 bushels. The area under corn in the calendar year 1900, according to the reports of the Department of Agriculture, was 83,320,872 acres, producing 2,105,102,516 bushels, having a farm value of \$751,220,034, the value per bushel on Dec. 1 being 35.7 cents, and the yield per acre having been 25.3 bushels,

giving an average return of \$9.02 per acre. The area under wheat was 42,495,385 acres, yielding 522,229,505 bushels, an average of 12.3 bushels per acre, making the crop worth at 62 cents a bushel, the average price on Dec. 1, \$323,525,177, an average of \$7.61 per acre. The area under rye was 1,591,362 acres, producing 23,995,417 bushels, having a value of \$12,295,417 on the farm, or \$7.73 per acre, the price on Dec. 1 having been 51.2 cents, the yield 15.1 bushels per acre. The area sown to oats was 27,364,795 acres, producing 809,125,989 bushels, 29.6 bushels to the acre, worth 25.8 cents a bushel, \$7.63 per acre, and \$208,669,233 for the whole crop. The area under buckwheat was 637,030 acres, yielding 9,566,966 bushels, an average of 15 bushels, worth \$5,341,413 at 55.8 cents a bushel, giving \$8.37 an acre. The barley crop from 2,894,282 acres was 58,925,833 bushels, worth \$24,075,271 at 40.8 cents a bushel, giving \$8.32 an acre for the average yield of 20.4 bushels. Of the total wheat crop, 82,488,655 bushels were raised in Kansas, 51,509,252 bushels in Minnesota, 33,325,897 bushels in Dakota, 28,543,628 bushels in California, 25,096,661 bushels in Washington, 24,801,900 bushels in Nebraska, 21,798,223 bushels in Iowa, 20,281,334 bushels in Pennsylvania, 18,846,713 bushels in Missouri, 18,657,373 bushels in Oklahoma, 17,982,068 bushels in Illinois, 16,198,912 bushels in Oregon, 15,187,848 bushels in Maryland, 13,166,599 bushels in Wisconsin, 12,442,846 bushels in Kentucky, 9,421,932 bushels in Virginia, 9,271,764 bushels in Michigan, 8,523,876 bushels in Ohio, 6,496,166 bushels in New York, 6,411,702 bushels in Indiana, 5,960,803 bushels in North Carolina, 4,452,895 bushels in West Virginia, 2,689,418 bushels in Arkansas, 1,929,963 bushels in Montana, 916,351 bushels in Alabama, and 25,724,492 bushels in other States and Territories. The hay crop in 1900 was 50,110,906 tons, cut from 39,132,800 acres, an average crop of 1.28 ton an acre, worth at the average price of \$8.89 a ton on the farm the total sum of \$445,538,870. Iowa raised 5,006,470 tons of hay, Kansas 4,031,461 tons, New York 3,351,991 tons, Missouri 2,768,015 tons, California 2,708,171 tons, Pennsylvania 2,672,561 tons, Nebraska 2,639,489 tons, Illinois 2,119,419 tons, South Dakota 2,064,196 tons, Colorado 1,783,133 tons, Michigan 1,727,617 tons, Oregon 1,677,085 tons, Indiana 1,663,452 tons, Ohio 1,652,797 tons, Minnesota 1,423,344 tons, Wisconsin 1,218,354 tons, Vermont 1,066,524 tons, Washington 846,491 tons, Maine 843,997 tons, Idaho 659,103 tons, and Montana, Virginia, Massachusetts, West Virginia, Texas, New Hampshire, and Utah each more than 500,000 tons. The area of the potato crop was 2,611,054 acres, yielding 210,926,897 bushels, 80.8 bushels to the acre, worth \$90,811,167, the average price having been 43.1 cents a bushel; New York raised 27,481,356 bushels, Indiana 16,630,941 bushels, Wisconsin 15,619,641 bushels, Illinois 15,296,104 bushels, Missouri 14,004,576 bushels, Michigan 12,561,584 bushels, Pennsylvania 10,921,748 bushels, Missouri 10,106,961 bushels, and Nebraska, Indiana, Iowa, Kansas, and Maine over 6,000,000 bushels each. The tobacco crop of the United States in 1896 was 403,004,320 pounds, grown on 594,749 acres, and its value was \$24,258,070. Alabama produced 1,005,313 bales of cotton on 2,883,049 acres in 1899, the value of the crop being \$35,852,176; Arkansas on 1,726,350 acres raised 669,385 bales, worth \$24,298,676; Florida, 41,855 bales, worth \$2,189,805, on 149,403 acres; Georgia, 1,345,699 bales on 3,287,741 acres, value \$48,024,822; Louisiana, 699,476 bales, valued at \$25,670,000, on 1,179,156 acres; Mississippi, 1,203,739 bales, valued at \$44,175,897, on 2,784,286 acres; North Carolina, 503,825 bales, valued at \$13,145,257, on

1,219,888 acres; South Carolina, 830,714 bales, valued at \$29,377,647, on 2,212,020 acres; Tennessee, 192,263 bales, valued at \$6,950,307, on 734,415 acres; Texas, 2,438,555 bales, valued at \$92,187,133, on 6,642,309 acres; Virginia, 8,007 bales, valued at \$293,669, on 35,302 acres; other States and Territories, 204,007 bales, valued at \$7,682,479, on 549,578 acres; total area planted to cotton, 23,403,497 acres, producing 9,142,838 bales, valued at \$334,847,868. The crop of cotton moved during the year ending Aug. 31, 1900, was 9,436,416 bales, averaging 478 pounds net and 504.12 pounds gross, or 4,757,062,942 pounds, having a fair value estimated at \$357,000,000. The exports of domestic cotton during the year were 3,100,583,188 pounds, 65.18 per cent. of the crop, leaving 1,656,479,754 pounds of domestic cotton for consumption; imports of foreign cotton were 87,398,521 pounds, and exports 1,381,463 pounds, leaving 66,017,058 pounds of foreign cotton retained for consumption and making the total consumption of domestic and foreign cotton 1,722,496,812 pounds. Out of 9,422,000 bales handled during the crop year, 2,343,000 were exported to Great Britain and 3,603,000 to other countries, making the total exports 5,946,000 bales; and 2,047,000 bales were taken by northern and 1,597,000 by southern mills, making the domestic consumption 3,644,000 bales, or 39 per cent. of the commercial crop. The wool produced in the United States during the year ending June 30, 1900, amounted to 288,636,821 pounds, of which 2,200,309 pounds were exported and 286,436,512 pounds retained for consumption; imports of foreign wool were 155,928,455 pounds, and exports 5,702,251 pounds, leaving for consumption 150,226,204 pounds of foreign wool, 34.4 per cent. of the total consumption, which amounted to 436,665,510 pounds. The number of sheep in the country on April 1, 1900, was 40,267,818, of which 3,786,688 were in New Mexico, 3,717,160 in Montana, 2,780,546 in Wyoming, 2,754,499 in Ohio, 2,576,240 in Idaho, 2,351,274 in Oregon, 2,317,636 in Texas, 2,261,917 in Utah, 2,128,508 in Colorado, 1,907,430 in California, 1,340,456 in Michigan, 1,103,942 in Arizona, 819,088 in New York, 777,677 in Pennsylvania, 759,399 in Washington, 726,040 in Wisconsin, and more than 500,000 each in Indiana, Illinois, Nevada, Iowa, Missouri, and Kentucky. The total product of washed and unwashed wool in 1900 was estimated at 259,972,815 pounds, or, including 28,663,806 pounds of pulled wool, at 288,636,621 pounds, the average weight of fleece being 6.46 pounds, the shrinkage 61.1 per cent., the product of scoured wool 101,024,837, or, including 17,198,283 pounds of pulled wool, 118,223,120 pounds.

The number of horses in the country on Jan. 1, 1900, as reported by the Department of Agriculture, was 13,537,524, valued at \$603,069,442; mules, 2,086,027, value \$111,717,092; milch cows, 16,292,360, value \$514,812,106; oxen and other cattle, 27,610,054, value \$689,486,280; sheep, 41,883,065, value \$122,665,913. The total value of farm animals was \$2,042,650,813, exclusive of swine, of which there were 38,651,631 in 1899, valued at \$170,109,743.

The production of cane sugar in 1900 was estimated at 334,594,450 pounds, 329,968,450 pounds in Louisiana and 4,626,000 pounds in other States; of molasses, 18,163,449 gallons, 14,971,313 gallons Louisiana and 4,626,000 pounds in other States; The total production of refined sugar in the calendar year 1900 was 2,219,847 tons, showing a consumption of 65.2 pounds per capita, 1,950,014 tons having been manufactured from imported raw sugar, 7,647 tons from imported molasses, and 174,450 tons from domestic cane sugar; 82,736 tons

were domestic beet sugar, and about 5,000 tons were maple sugar. The production of sugar from beet roots in the United States was 62,826 tons in 1898, 34,453 tons in 1897, 39,684 tons in 1896, 20,443 tons in 1894, and previous to that the industry was in the experimental stage. The consumption of distilled spirits in the United States during the fiscal year 1900 was 97,248,382 proof gallons, according to the reports of the Commissioner of Internal Revenue, being 1.27 gallon per capita, consisting of 1,386,301 gallons of domestic spirits distilled from fruit, 94,156,023 gallons from grain, etc., and 1,705,998 gallons of imported spirits. The consumption of wines was 30,427,491 gallons, 0.4 gallon per capita, 26,492,491 gallons being of domestic production and 3,935,000 gallons imported. The consumption of malt liquors was 1,221,500,160 gallons, 16.01 gallons per capita, 1,218,183,252 gallons having been brewed in the United States and 3,316,908 gallons imported for consumption. The production of oleomargarine in the fiscal year 1900 was 104,263,651 pounds, paying \$2,085,273 in internal revenue taxes.

The production of petroleum during the calendar year 1899 was 2,396,975,700 gallons, and 17,540 gallons were imported, making a total of 2,396,993,240 gallons. The exports were 133,023,656 gallons in the crude state and 948,720,575 gallons manufactured into illuminating oil, making a total of 1,081,744,231 gallons, which left 1,315,249,009 gallons for domestic consumption, the export being 45.13 per cent. of the total product. The production of bituminous coal in the calendar year 1898 was 172,608,917 tons, and the imports were 1,251,512 tons, giving a total supply of 173,860,429 tons, of which 170,379,977 tons remained for consumption after the exportation of 3,480,452 tons, or 2.02 per cent. of the domestic product. The production has increased 70 per cent. in ten years and the percentage exported has doubled. The quantity of bituminous coal marketed in 1899 was estimated by the United States Geological Survey at 138,564,925 tons, valued at \$135,017,663; the quantity of anthracite coal at 47,823,241 tons, valued at \$86,081,834; total, 186,388,166 tons, valued at \$221,099,497. The total production of anthracite and bituminous coal was estimated at 226,553,504 tons. The total output for the calendar year 1899 of bituminous coal was reported by the Geological Survey as 193,321,987 short tons; Pennsylvania anthracite, 53,944,647 long tons; value of stone, \$44,736,576; petroleum, 57,070,850 barrels, valued at \$64,603,904; value of natural gas, \$20,024,873; pig iron produced, 13,620,703 long tons, value \$245,172,654; silver, 54,764,500 ounces, of the coining value of \$70,806,626 and the commercial value of \$32,858,700; gold, 3,437,210 ounces, of the value of \$71,053,400; copper, 585,342,124 pounds, value at New York \$104,190,898; lead, 209,240 short tons, value at New York \$18,831,600; zinc, 119,408 short tons, value at New York \$13,731,920; quicksilver, 30,454 flasks of 76½ pounds, value at San Francisco \$1,452,745; aluminum, 5,200,000 pounds, value at Pittsburgh \$1,716,000; antimony, 1,275 short tons, value at San Francisco \$251,875; nickel, 22,541 pounds, value \$8,566; platinum, 300 ounces, value \$1,800. The estimated value of brick clay produced was \$11,250,000, and of other clay \$1,250,000. Of cement, 14,311,407 barrels were produced, valued at \$14,417,058. The number of gallons of mineral waters sold was 39,562,136, valued at \$6,948,030. Of phosphate rock, 1,515,702 long tons were dug, value \$5,084,076. The production of salt was 18,350,503 barrels, and its value \$7,509,184. Of limestone for iron flux, 6,707,435 long tons were produced, value \$4,695,205; of gypsum, 479,235 short tons, value \$1,287,080; of fibrous talc,

54,655 short tons, value \$438,150; of pyrite, 174,734 long tons, value \$543,249; of corundum and emery, 4,900 short tons, value \$150,000; of barytes, 41,894 short tons, value \$139,528; of fluorspar, 15,900 short tons, value \$96,650; of feldspar, 27,202 long tons, value \$228,545; of manganese ore, 9,935 long tons, value \$82,278; of flint, 37,852 long tons, value \$231,345; of bauxite, 35,280 long tons, value \$125,598; of zinc white, 6,707,435 short tons, value \$4,695,205; of asphaltum, 75,085 short tons, value \$553,904; of soapstone, 24,765 short tons, value \$330,805; of mineral paints, 63,111 short tons, value \$728,389; of sulphur, 4,830 short tons, value \$107,500; of fuller's earth, 12,381 short tons, value \$79,644; of marls, 60,000 short tons, value \$30,000; of infusorial earth and tripoli, 4,634 short tons, value \$37,032; of magnesite, 1,280 short tons, value \$18,480; of abrasive garnet, 2,765 short tons, value \$98,325. The value of grindstones was \$675,586; of oilstones, etc., \$208,283; of pumice stone, \$10,000; of millstones, \$28,115. The value of precious stones was \$185,770. The production of borax was 40,714,000 pounds, valued at \$1,139,882; of mica, 108,570 pounds of sheet, worth \$70,587, and 1,505 tons of scrap, worth \$30,878; of graphite, 2,900,732 pounds of crystalline and 2,324 tons of amorphous, worth together \$167,106; of cobalt oxide, 10,230 pounds, value \$18,512; of rutile, 230 pounds, value \$1,030; of bromine, 433,004 pounds, value \$108,251; of asbestos, 681 tons, value \$11,740. The value of nonmetallic products was \$447,790,862; that of metallic products was \$527,218,084, and that of products not specified was estimated at \$1,000,000, giving as the total value of mineral products \$676,008,946.

The number of iron furnaces in blast on Dec. 31, 1900, was 232 out of the total number of 406, of which 153 were in Pennsylvania, 54 in Ohio, 45 in Alabama, 27 in Virginia, 19 in New York, 19 in Tennessee, 17 in Illinois, 12 in New Jersey, 12 in Michigan, 8 in Kentucky, 7 in Maryland, 6 in Wisconsin, 5 in Georgia, 4 each in Connecticut and Texas, 3 in Massachusetts and in West Virginia, 2 in Missouri and in Colorado, and 1 in Minnesota and in Oregon. The total production of pig iron for the calendar year 1900 was 13,789,242 tons of 2,240 pounds. In 1899 the production of pig iron was 13,620,703 tons; of spiegeleisen and ferro-manganese, 219,768 tons; of bar, hoop, and structural shapes, 4,906,801 tons; of structural shapes alone, 906,277 tons; of wire rods, 1,090,376 tons; of plate and sheet iron, 1,903,505 tons; of cut nails and spikes, 85,015 tons; of wire nails, 339,264 tons; of rolled iron and steel, including nail plate, 8,084,697 tons; of rolled, including also rails, 10,357,397 tons; of Bessemer steel rails, 2,270,585 tons; of open-hearth steel rails, 523 tons; of iron rails, 1,592 tons; of street rails, 154,246 tons; total rails, 2,272,700 tons; of Bessemer steel ingots and castings, 7,586,354 tons; of open-hearth steel ingots and castings, 2,947,316 tons; of crucible steel, 101,213; of all other ingots and castings, 4,974; total crude steel, 10,639,857 tons; of blooms, 13,074 tons; of tin plates for the year ending June 30, 1900, 397,767 tons. Of the pig iron, 1,677,048 tons were produced with anthracite or mixed anthracite and bituminous coal, 339,874 tons with charcoal, and 11,727,712 tons with bituminous coal and coke. The exports of domestic pig iron in the fiscal year 1900 were 160,690 tons; imports, 61,100 tons; exports of foreign, 157 tons; retained for consumption, 13,520,936 tons, the percentage of foreign iron having decreased from 10.64 per cent. in 1892 to 0.40 per cent. The export of rails was 347,805 tons, and the import 2,487, making the quantity retained for consumption 1,927,382 tons. The imports of

tin plates were 147,963,804 pounds, valued at \$4,799,796, 147,321,985 pounds coming from Great Britain and 641,819 pounds from other countries. The quantity of tin plates manufactured in the United States was 446,982,063 pounds, comprising 355,347,670 pounds of tin and 91,634,393 pounds ofterne plates, 446,924,855 pounds being made from American and 57,208 pounds from foreign black plates, whereas in 1893 the quantity manufactured was 99,819,202 pounds, of which 56,219,478 pounds were made from imported black plates.

The volume of foreign commerce in the year ending June 30, 1900, reached \$2,244,424,266, compared with \$1,924,171,791 in 1899, the highest figure attained till then. The excess of merchandise exports over imports in 1900 was \$544,541,898, compared with \$529,874,813 in 1899, and \$615,432,676 in 1898, the excess for the three years amounting to \$1,689,849,387. The total value of merchandise imports in 1900 was \$849,941,184, an amount exceeded only in 1893, when \$866,400,922 worth of merchandise was imported and there was an adverse balance of \$18,737,728. The value of domestic exports in 1900 was \$1,370,763,571, exceeding the total for 1898, the highest till then attained, by \$160,471,658. The value of foreign exports in 1900 was \$23,719,511, making the total value of merchandise exports \$1,394,483,082.

The values of the articles imported in the year ending June 30, 1900, are given in the following table:

	Value.
Agricultural implements.....	\$1,852
Animals:	
Cattle, free.....	202,615
Cattle, dutiable.....	2,055,079
Horses, free.....	357,272
Horses, dutiable.....	239,320
Sheep, free.....	48,784
Sheep, dutiable.....	1,316,702
All other, including fowls, free.....	194,880
All other, dutiable.....	176,658
Antimony ore.....	65,745
Antimony, regulus and metal.....	275,774
Articles, the growth or manufacture of the United States, returned.....	4,504,565
Articles for the use of religious or educational institutions.....	654,546
Art works:	
The production of American artists.....	344,673
All other.....	2,264,218
Asbestos, unmanufactured.....	293,347
Asphaltum.....	499,265
Bark, hemlock.....	46,630
Beads and bead ornaments.....	1,177,670
Beeswax.....	51,526
Beverages:	
Ginger ale.....	249,456
All other.....	100,730
Blamuth.....	225,824
Blacking.....	66,642
Bolting cloths.....	234,644
Bones, horns, and hoofs, unmanufactured.....	830,063
Bone and horn, manufactures of.....	271,883
Books, music, maps, engravings, etc., free.....	2,019,660
Books, etc., dutiable.....	1,561,966
Brass, and manufactures of.....	24,616
Brass, old, free.....	560,196
Breadstuffs:	
Barley.....	91,040
Corn.....	1,942
Oats.....	18,760
Oatmeal.....	13,499
Rye.....	366
Wheat.....	240,496
Wheat flour.....	3,771
All other, free.....	411,020
All other, dutiable.....	1,023,236
Bristles, not sorted or prepared.....	22,330
Bristles, bunched or prepared.....	2,130,537
Brushes.....	977,513
Burr stones.....	21,687
Buttons and button forms.....	562,501
Cement.....	3,270,916
Chalk.....	86,511
Chemicals, drugs, and dyes:	
Alizarin and alizarin colors.....	768,464
Argols, or wine lees.....	2,398,623
Barks, cinchona, etc.....	563,065
Coal-tar colors and dyes.....	4,690,072
Cochineal.....	31,211

Chemicals, drugs, and dyes:

Logwood	628,464
Other dyewoods	239,908
Extracts of dyewoods	221,183
Glycerin	2,155,414
Gum arabic	113,041
Camphor, crude	485,071
Chicle	854,720
Copal, cowrie, and dammar	2,598,194
Gambier, or terra japonica	910,639
Shellac	1,408,103
All other gums	1,014,986
Indigo	1,446,490
Licorice root	1,667,266
Lime, chloride of	1,461,019
Mineral waters	662,022
Opium, crude	1,123,756
Opium, prepared for smoking, etc.	1,065,965
Potash, chloride of	93,538
Potash, muriate of	1,804,254
Potash, nitrate, or saltpeter	269,739
Potash, all other	1,269,635
Quinia, sulphate, alkaloids, or salts	931,390
Soda, caustic	177,857
Soda, nitrate of	4,730,807
Sol soda	31,072
Soda ash	644,450
Soda, all other salts of	814,425
Sulphur, or brimstone, crude	2,711,912
Sumac, ground	228,177
Vanilla beans	1,209,334
All other chemicals, etc., free	6,553,756
All other chemicals, etc., dutiable	6,530,037
Chicory root, unground	17,782
Chicory root, prepared	12,941
Chocolate	240,141
Chromic iron	878,099
Clays or earths	926,111
Clocks and watches:	
Clocks, and parts of	844,440
Watches, and parts of	1,406,111
Coal and coke:	
Coal, anthracite	704
Coal, bituminous	4,476,032
Coke	232,555
Cocoa, crude, and leaves and shells	5,657,283
Cocoa, prepared	813,561
Coffee	52,467,343
Coffee substitute	49,029
Coins and antiquities	92,453
Collodion, manufactures of	378,568
Copper, and manufactures of:	
Ore and regulus	3,032,133
Pigs, bars, ingots, plates, etc.	12,419,901
Copper manufactures	37,569
Cork wood or bark	1,444,825
Corks and cork manufactures	464,658
Cotton, and manufactures of:	
Cotton, raw	7,960,945
Cotton waste or flocks	244,447
Cloth, not bleached, dyed, or printed	857,604
Cloth, bleached, dyed, or printed	8,156,301
Clothing and wearing apparel	1,231,231
Knit goods	4,715,762
Laces, edgings, embroideries, etc	19,208,165
Yarn, warps, etc.	2,038,058
All other manufactures	5,528,218
Diamond dust or bort	621,832
Earthen, stone, and china ware:	
China, porcelain, and bisque, not decorated	1,081,685
China, porcelain, and bisque, decorated	7,176,659
All other	886,921
Eggs	8,741
Emery ore	162,066
Emery, grains and ground	28,317
Fans, except palm leaf	486,053
Feathers, etc., natural or artificial:	
Feathers and downs, crude	1,736,458
Feathers, dressed or manufactured	117,265
Feathers, flowers, leaves, etc., artificial	2,325,302
Felt, adhesive	26,893
Fertilizers:	
Guano	56,066
Phosphates, crude	504,493
All other	1,136,523

Fibers, vegetable, and textile grasses, and man-

ufactures of:	
Flax	1,646,274
Hemp	450,269
Istle or Tampico fiber	475,090
Jute and jute butts	3,956,413
Manila	7,172,968
Sisal grass	11,782,263
All other unmanufactured	891,128
Bagging and gunny cloth for cotton	318,417
Bags of jute	1,327,215
Cables, cordage, and twine	68,920
Carpets and carpeting	43,254
Coir yarn	141,850
Fabrics of single jute yarn	10,606,185
Handkerchiefs	2,122,776

Fibers, vegetable, and textile grasses, and man-

ufactures of:	
Oilcloths	407,008
Twine, binding	443,487
Yarns or threads	569,981
All other manufactures	15,510,275
Fish:	
Salmon	115,069
Lobsters, canned or uncanned	931,219
All other fresh	1,130,473
Anchovies and sardines	1,468,768
Cod, haddock, etc., salted, smoked, or pickled	543,172
Herring, dried or smoked	127,555
Herring, pickled or salted	1,355,012
Mackerel, pickled or salted	1,376,900
Salmon, pickled or salted	54,236
Fish bladders and sounds	51,606
All other cured	840,631
Fruits and nuts:	
Bananas	5,877,835
Currants	916,903
Dates	410,349
Figs	513,895
Lemons	3,666,881
Oranges	1,067,041
Plums and prunes	47,700
Raisins	591,124
Preserved fruit	1,243,479
All other fruits, free	662,510
All other fruits, dutiable	1,327,036
Almonds	949,093
Cocoanuts	702,947
All other nuts	1,326,804
Furs and fur skins, undressed	6,646,807
Furs, manufactured	5,413,317
Glass and glassware:	
Bottles, vials, jars, etc.	464,468
Cylinder, crown, and common window glass, unpolished	1,555,024
Cylinder and crown glass, polished	539,062
Cylinder and crown glass, silvered	296
Plate glass, rolled or rough	7,915
Plate glass, cast, polished	226,295
Plate glass, silvered	12,413
Glass for optical instruments	123,449
All other glass	2,106,084
Glue	537,492
Grease and oils	222,943
Gunpowder and explosives:	
Gunpowder	15,835
Firecrackers	196,242
Other explosives	169,073
Gut, unmanufactured	13,138
Gut manufactured	66,430
Hair, unmanufactured	2,445,964
Hair, manufactures of	248,226
Hats, bonnets, and hoods, materials for	2,062,801
Hats, bonnets, and hoods	734,633
Hay	1,019,743
Hide cuttings and other glue stock	1,223,521
Hides and skins:	
Goat skins	21,987,674
Hides of cattle	19,406,217
All other cattle	16,539,807
Honey	70,857
Hops	713,701
Household and personal effects of persons arriving	2,007,805
India rubber and gutta-percha:	
Gutta-percha	178,616
Gutta-joolatong	237,214
India rubber	81,376,867
Gutta-percha, manufactures of	254,332
India rubber, manufactures of	564,068
Old scraps for remanufacture	1,240,231
Ink and ink powders	71,236
Iron and steel, and manufactures of:	
Iron ore	1,497,022
Pig iron	2,199,501
Scrap iron and steel	562,085
Bar iron	1,028,877
Bars, railway, of iron or steel	53,738
Hoop, band, or scroll	31,749
Ingots, blooms, billets, and bars of steel	1,382,028
Sheet, plate, and taggers iron or steel	668,657
Tin plates and terneplates and taggers tin	4,799,796
Wire rods	1,114,145
Wire, and articles made from	866,816
Anvils	36,420
Chains	43,720
Cutlery	1,634,322
Files, file blanks, rasps, and floats	69,707
Firearms	838,528
Machinery	3,560,090
Needles	367,568
Shotgun barrels, rough-bored	182,906
All other manufactures	1,671,899
Ivory, animal	805,446
Ivory, vegetable	243,548
Ivory, manufactures of	40,418

	Value.	Soap :	Value.
Jewelry, gold and silver work, and precious stones:		All other.....	291,452
Diamonds, miners', glaziers', and engravers', and watch jewels.....	3,943,198	Spices:	
Jewelry and gold and silver work.....	3,545,930	Nutmegs.....	351,338
Precious stones, and imitations of.....	10,238,993	Pepper, black and white.....	1,323,635
Lead, and manufactures of:		All other, unground.....	1,376,243
Pigs, bars, old, and in ore.....	3,142,489	Ground.....	300,004
Manufactures of.....	13,781	Spirits, distilled:	
Leather, and manufactures of:		Of domestic manufacture, returned.....	630,574
Band or belting and sole leather.....	47,218	Brandy.....	696,540
Calfskins, tanned, dressed, patent, etc.....	132,074	All other.....	2,282,717
Skins for morocco.....	3,134,637	Sponges.....	536,308
Upper leather, etc.....	3,204,623	Starch.....	222,206
Gloves of kid and other leather.....	6,107,795	Straw, unmanufactured.....	15,750
All other manufactures.....	665,259	Straw, manufactures of.....	336,267
Lime.....	63,900	Sugar, molasses, and confectionery:	
Lithographic stone.....	78,541	Molasses, free.....	359
Malt.....	4,127	Molasses, dutiable.....	890,165
Malt liquors:		Sugar not above No. 16, beet.....	14,900,609
In bottles or jugs.....	1,079,723	Sugar not above No. 16, cane, free.....	20,392,150
In other coverings.....	647,538	Sugar not above No. 16, cane, dutiable.....	64,667,217
Manganese, ore and oxide of.....	2,693,003	Sugar above No. 16.....	390,998
Marble and stone:		Confectionery.....	28,100
Marble, and manufactures of.....	812,606	Sulphur ore.....	1,224,711
Stone, and manufactures of.....	215,944	Tar and pitch.....	18,922
Matches.....	156,705	Tea.....	10,558,110
Matting for floors, straw.....	2,674,911	Tin in bars, blocks, pigs, or grain.....	19,104,301
Meerschaum.....	37,459	Tobacco, and manufactures of:	
Metal compositions:		Leaf, suitable for cigar wrappers.....	5,122,359
Bronze manufactures.....	778,634	All other leaf.....	8,174,864
All other.....	4,791,493	Cigars, cigarettes, and cheroots.....	2,299,923
Mineral substances not elsewhere specified.....	333,110	All other manufactures.....	64,214
Moss, seaweed, etc.....	24,253	Toys.....	2,923,984
Musical instruments.....	1,090,541	Umbrellas, parasols, and sunshades.....	22,412
Nickel ore and matte.....	1,070,980	Varnishes.....	103,985
Oil cake.....	1,437	Vegetables:	
Oils:		Beans and dried peas.....	1,049,443
Whale and fish oil.....	373,367	Onions.....	357,901
Other animal oil.....	3,255	Potatoes.....	147,349
Mineral oil, free.....	217,405	Pickles and sauces.....	306,223
Mineral oil, dutiable.....	3,049	All other, raw.....	371,963
Olive salad oil.....	1,170,871	All other, preserved.....	703,198
Other vegetable, free.....	2,508,990	Vinegar.....	80,724
Other vegetable, dutiable.....	781,686	Waste, not elsewhere specified.....	661,250
Volatile or essential, free.....	1,487,111	Wines:	
Volatile or essential, dutiable.....	372,073	Champagne and other sparkling.....	4,115,908
Paints, pigments, and colors.....	1,535,461	Still wines in casks.....	1,744,736
Palm leaf:		Still wines in other coverings.....	1,560,861
Fans.....	59,194	Wood, and manufactures of:	
Other manufactures.....	5,277	Mahogany.....	1,572,299
Paper, and manufactures of:		Other cabinet woods.....	858,433
Lithographic labels and prints.....	906,609	Logs and round timber.....	879,956
Parchment papers.....	1,061,113	Hewn, squared, or sided timber.....	46,550
All other.....	2,915,758	Boards, planks, and other sawed lumber.....	7,475,509
Paper stock:		Shingles.....	1,011,234
Rags.....	1,372,156	Other lumber, dutiable.....	1,342,593
All other.....	1,989,622	All other unmanufactured, free.....	2,645,910
Pencils, lead, and pencil leads.....	239,006	Cabinet ware and house furniture.....	599,013
Pencils, slate.....	17,881	Wood pulp.....	2,405,630
Perfumeries and toilet preparations.....	533,411	All other manufactures.....	1,949,923
Pipes and smokers' articles.....	301,959	Wool and camel, goat, and alpaca hair, and manufactures of:	
Plants, trees, and vines, free.....	7,016	Clothing wool.....	8,009,965
Plants, trees, and vines, dutiable.....	963,369	Combing wool.....	2,633,271
Plaster of Paris.....	242,898	Carpet wool.....	9,617,230
Platinum.....	1,770,617	Clothing, ready-made, and other apparel.....	992,619
Platinum retorts, etc.....	62,101	Cloths.....	5,129,529
Plumbago.....	2,345,204	Dress goods.....	5,872,065
Provisions, comprising meat and dairy products:		Knit fabrics.....	495,961
Meats and meat extracts.....	366,589	Rags, rolla, shoddy, and wastes.....	86,837
All other meat products.....	105,726	Shawls.....	79,935
Butter.....	9,769	Yarns.....	129,688
Cheese.....	1,761,613	All other manufactures.....	696,949
Milk.....	42,686	Zinc or spelter in blocks and pigs, and old.....	152,273
Pumice and pumice stone.....	54,478	Zinc, manufactures of.....	19,639
Rennets.....	66,907	All other free articles.....	1,033,646
Rice, free (from Hawaii).....	29,306	All other dutiable articles.....	1,092,342
Rice, dutiable.....	1,875,609	Total imports of merchandise.....	\$849,941,154
Rice flour, rice meal, and broken rice.....	374,121		
Salt.....	625,863		
Sausages, Bologna.....	95,944		
Sausage casings.....	646,889		
Seeds:			
Linseed.....	94,126		
All other, free.....	993,521		
All other, dutiable.....	707,401		
Shell, unmanufactured.....	1,019,731		
Shell, manufactured.....	87,934		
Silk, and manufactures of:			
Cocoons.....	18,295		
Raw silk.....	44,549,672		
Silk waste.....	761,853		
Clothing.....	1,667,641		
Dress and piece goods.....	15,425,997		
Laces and embroideries.....	3,206,857		
Ribbons.....	1,811,644		
Spun silk.....	3,723,348		
Velvets, plushes, and other pile fabrics.....	2,316,115		
All other manufactures.....	2,752,771		
Soap:			
Fancy, perfumed, and toilet.....	331,692		

Of the total imports, the value of \$367,236,866 was free of duty and \$482,704,318 dutiable.

The total value of animals imported free of duty was \$803,191; of dutiable animals, \$3,727,759. The numbers of animals imported free of duty for the improvement of breeds were 1,045 cattle, 1,234 horses, and 2,427 sheep; of dutiable animals, 179,961 cattle, 1,818 horses, and 379,365 sheep. The quantity of antimony metal or regulus was 3,533.751 pounds, of ore 5,707,112 pounds. Of asphaltum, 136,576 tons were imported.

The import of hemlock bark was 22,580 cords. Of British ginger ale, 337,977 dozen bottles were imported. The quantity of bismuth was 187,681 pounds. The number of pounds of old brass was 4,593,894. Imports of breadstuffs were 189,757

bushels of barley, 2,480 bushels of corn, 41,523 bushels of oats, 234,959 pounds of oatmeal, 330 bushels of rye, 316,968 bushels of wheat, and 717 barrels of flour. Including the various farinaceous food preparations, which made five sixths of the total value, the imports of breadstuffs amounted to \$1,803,729. The quantity of crude bristles was 27,140 pounds, and of sorted and bunched bristles 2,503,018 pounds.

The importation of Portland, Roman, and other hydraulic cement was 2,356,422 barrels; of chalk, 92,615 tons. The imports of chemicals, drugs, and dyes included 5,984,991 pounds of alizarin colors, 27,339,480 pounds of crude tartar and wine lees, 4,107,358 pounds of cinchona or other bark from which quinine is extracted, 157,917 pounds of cochineal, 48,188 tons of logwood, 3,350,768 pounds of logwood extract and decoctions, 27,943,106 pounds of glycerin, 961,366 pounds of gum arabic, 1,789,580 pounds of crude camphor, 2,297,992 pounds of gum chicle, 23,829,342 pounds of copal and similar gums, 38,882,940 pounds of gambier, 10,621,451 pounds of shellac, 2,746,944 pounds of indigo, 106,333,199 pounds of licorice root, 136,403,151 pounds of chloride of lime or bleaching powder, 1,972,349 gallons of mineral waters, 544,938 pounds of crude opium and 142,479 pounds of opium prepared for smoking or containing less than 9 per cent. of morphine, 1,499,752 pounds of chlorate of potash, 115,276,906 pounds of the muriate, 10,332,836 pounds of nitrate or saltpeter, and 54,552,598 pounds of other potassic salts, 3,313,749 ounces of quinia sulphate and other alkaloids and salts of cinchona bark, 11,429,989 pounds of caustic soda, 184,247 tons of nitrate of soda, 6,624,314 pounds of sal soda, 78,571,870 pounds of soda ash, and 23,632,374 pounds of other salts of soda, 155,399 tons of crude sulphur or brimstone, 10,335,980 pounds of ground sumac, and 255,966 pounds of vanilla beans. The value of dyewoods was \$1,083,644; of gums, \$6,884,704; of potash salts, \$3,437,160; of soda salts, \$5,908,611; the total value of chemicals, drugs, and dyes, \$53,705,152, of which \$31,355,759 were free of duty and \$22,349,393 dutiable. The import of raw chicory root was 1,216,518 pounds; of roasted and ground chicory, 384,957 pounds; of chocolate, 1,209,012 pounds. Of chrome ore, or chromate of iron, 21,830 tons were imported; of clays or earths, 138,625 tons. The importation of coal was 156 tons of anthracite, 1,707,076 tons of bituminous, and 56,448 tons of coke. The imports of crude cacao, including leaves and shells, were 41,746,872 pounds; of manufactured cocoa, 1,012,368 pounds. Of this, 39,191,140 pounds were re-exported, making the net imports 748,800,771 pounds, valued at \$48,777,126, the average price being 6.5 cents a pound, showing a consumption per capita of 9.81 pounds. The quantity of coffee imported was 787,991,911 pounds. Of coffee substitute, 1,262,659 pounds were brought in. Copper imports consisted of 36,205 tons of ore and regulus and 84,638,794 pounds of bars, ingots, and plates, and old and other manufactured copper. The value of copper and manufactures, not including ore, was \$12,457,470. The imports of unmanufactured cotton were 67,398,521 pounds of raw cotton and 7,899,328 pounds of waste or flocks; of cotton cloth, 3,061,700 square yards of unbleached and 61,986,063 square yards of bleached or colored fabrics; of yarns, 5,272,491 pounds; total value of cloth, \$8,513,905. The total value of manufactured articles was \$41,296,239.

There were 135,038 dozen eggs imported. The quantity of emery ore was 197,540 hundredweight; of grains and pulverized or refined emery, 703,739 pounds. The total value of china and earthenware was \$8,645,265.

The imports of fertilizing materials consisted of 4,756 tons of guano and 110,065 tons of crude phosphates, in addition to manufactured fertilizers; total value of fertilizers, \$1,697,986. The quantities of vegetable textile fibers were 6,907 tons of flax, 3,400 tons of hemp, 5,748 tons of istle, 102,693 tons of jute, 42,624 tons of Manila hemp, 76,921 tons of sisal grass, and 10,953 tons of other fibers and grasses; total value of unmanufactured, \$26,373,805, of which \$24,277,262 were free of duty. The imports of manufactures reported were 436,417 pounds of cables and cordage, 5,193,009 pounds of binding twine, 3,901,384 pounds of coir yarn, 2,857,675 pounds of other yarns and threads, 132,354 square yards of carpets, and 932,405 square yards of oilcloths; total value of manufactures, \$31,559,371. Among the fish imports were 1,199,079 pounds of fresh salmon, 7,497,227 pounds of canned and fresh lobsters, 14,395,483 pounds of dried codfish and cured haddock, hake, and pollock, 5,130,813 pounds of smoked and 156,217 barrels of pickled or salt herring, 92,733 barrels of salt mackerel, and 736,658 pounds of pickled or salted salmon. The total value of fish was \$7,472,057, of which \$1,045,240 were free and \$6,426,817 dutiable imports. The imports of fruits and nuts included 36,251,779 pounds of dried currants, 19,902,512 pounds of dates, 8,812,487 pounds of figs, 160,198,056 pounds of lemons, 68,618,938 pounds of oranges, 443,457 pounds of plums and prunes, 10,309,498 pounds of raisins, and 6,317,633 pounds of almonds. The total value of fruits and nuts was \$19,263,592.

The glass imports, of which quantities are reported, were 51,343,339 pounds of unpolished cylinder and crown and common window glass, 2,547,688 square feet of polished cylinder and crown glass, 571 square feet of the same silvered, 119,242 square feet of fluted, rolled, or rough plate glass, 941,879 square feet of cast plate glass, and 45,997 square feet of silvered plate glass. The total value of glass and glassware was \$5,037,931. The import of glue was 5,577,082 pounds. Of gunpowder, 31,212 pounds were imported; of firecrackers, 5,001,176 pounds.

There were 143,890 tons of hay imported. Imports of hides and skins comprised 81,998,818 pounds of goatskins, 163,865,165 pounds of hides of cattle, and 100,070,795 pounds of other skins. The value of hides and skins free of duty was \$38,527,481; dutiable, \$19,408,217. The import of honey was 146,860 gallons. The importation of hops amounted to 2,589,725 pounds.

Of India rubber, 49,377,138 pounds were imported; of rubber scraps for remanufacture, 19,093,547 pounds; of gutta-percha, 427,678 pounds; of gutta-joolatong, 8,701,753 pounds. The iron and steel imports shipped by weight were 147,963,804 pounds of tin plates, terneplates, and taggers' tin, 47,096,595 pounds of wire rods, 4,114,078 pounds of wire and wire manufactures, 580,438 pounds of anvils, and 639,020 pounds of chains. The total value of iron and steel imports, including manufactures but not including ore, was \$20,478,728. The import of ivory was 353,423 pounds; of vegetable ivory, 16,073,505 pounds.

Of lead, 196,378,961 pounds were imported. The import of lime was 48,793,888 pounds. Imports of leather were valued at \$6,519,172; of leather manufactures, \$6,773,024.

The importation of malt liquors in bottles was 1,081,818 gallons, and in casks, etc., 2,228,502 gallons. The quantity of manganese ore and oxide was 747,971,840 pounds.

Of nickel ore and matte, 23,547 tons were imported. The import of oil cake was 208,657 pounds. The quantity of fish and whale oil was 851,372 gallons; of other rendered oil, 18,050 gallons; of

mineral oil, 2,354,720 gallons; of olive oil, 907,702 gallons; total value of oils, \$6,817,780.

The number of dozens of palm-leaf fans was 1,376,682. The importation of parchment paper was 1,061,113 pounds; of rags for paper stock, 92,382,167 pounds. Of slate pencils, 255,012 gross were imported. The quantity of plaster of Paris, or sulphate of lime, was 204,850 tons in the ground state. Of platinum, 7,767 pounds were imported. The quantity of plumbago was 20,597 tons. Among provisions were 49,791 pounds of butter and 13,455,990 pounds of cheese, the chief import in this class; total value of provisions, \$2,285,383.

The quantity of rice imported free from the Hawaiian Islands was 596,100 pounds, and of rice paying duty 93,052,351 pounds, besides 23,031,440 pounds of rice flour, rice meal, and broken rice; total value of rice, \$2,279,030.

The importation of salt was 410,792,440 pounds. Of linseed, 67,379 bushels were imported. The total value of seeds was \$1,795,048. The imports of raw silk were 30,004 pounds of cocoons and 11,259,310 pounds of reeled silk, besides 1,784,404 pounds of waste; and of spun silk in skeins, caps, warps, or on beams, 2,420,552 pounds. The value of raw silk imports was \$45,329,700; of silk manufactures, \$30,694,373. Of velvets and pile silks, 708,354 pounds were imported. The imports of fancy soaps amounted to 809,299 pounds. Spices imported free were 1,590,811 pounds of nutmegs, 13,085,333 pounds of black and white pepper in the grain, and 19,652,652 pounds of other unground spices; and on 4,516,709 pounds of spices duty was paid; total value of spices, \$3,401,265. The number of gallons of domestic spirits returned, subject to the internal revenue tax, was 687,024 proof; of foreign brandy brought in, 244,100; of other foreign spirits, 1,530,896; total value of spirits, \$3,609,831. Of starch, 11,707,924 pounds were imported. The import of straw was 5,495 tons. Sugar imports comprised 14,435 gallons of molasses free of duty and 7,010,633 gallons of dutiable molasses, 701,539,452 pounds of beet, 504,713,105 pounds of free cane, and 2,800,374,691 pounds of dutiable cane sugar below No. 16 Dutch standard in color, and 11,459,282 pounds above the standard. Of the raw beet sugar, 95,221,922 pounds came from Austria, 15,142,873 pounds from Belgium, 588,933,642 pounds from Germany, 2,239,776 pounds from England, and 1,239 pounds from other countries; of the raw cane sugar, 7,135,681 pounds from England, 3,869 pounds from Canada, 3,907,387 pounds from Central America, 1,891,917 pounds from Mexico, 200,479,351 pounds from the British West Indies, 705,455,920 pounds from Cuba, 21,664,980 pounds from the Danish Antilles, 3,378,637 pounds from the Dutch Antilles, 72,558,181 pounds from Porto Rico, 122,206,692 pounds from Santo Domingo, 89,684,600 pounds from Brazil, 1,210,901 pounds from Colombia, 149,715,600 pounds from British Guiana, 13,265,520 pounds from Dutch Guiana, 75,155,975 pounds from Peru, 11,386 pounds from elsewhere in South America, 432,768 pounds from China, 9,840,433 pounds from British India, 1,162,202,854 pounds from the Dutch East Indies, 161,898 pounds from Hong-Kong, 1,076 pounds from Japan, 504,713,105 pounds from Hawaii, 49,490,542 pounds from British Africa, and 74,015,702 pounds from Egypt; total, 3,305,087,796 pounds, valued at \$85,059,307. The total imports of beet and cane sugar were 4,018,086,530 pounds, value \$100,250,974. The import of sulphur ore was 367,328 tons.

The number of barrels of tar and pitch was 2,829. The importation of tea was 84,845,107 pounds, of which 1,541,930 pounds were exported again, leaving 83,303,177 pounds for consumption,

or 1.09 pound per head of population, of the total value of \$10,325,987 and an average price of 12.4 cents a pound. The importation of tin in bars, blocks, pigs, or grain, or granulated was 70,158,915 pounds. Of tobacco, 5,561,068 pounds were imported for cigar wrappers, 14,058,559 pounds of fillers and Turkish and other leaf, and 460,559 pounds of cigars and cigarettes; total value of unmanufactured tobacco, 19,619,627 pounds, \$13,297,223; value of manufactures, \$2,364,137.

The import of varnishes was 43,743 gallons. The imports of vegetables were principally 967,031 bushels of beans and dried peas, 546,798 bushels of onions, and 155,861 bushels of potatoes; total value of vegetables, \$2,935,077. Of vinegar, 122,479 gallons were imported.

The imports of champagne were 310,149 dozen bottles; of still wines, 315,920 dozen bottles and 2,533,828 gallons in casks; total value of wines, \$7,421,495. The wood imports included 28,228 thousand feet of mahogany, 101,397 thousand feet of timber logs, 680,226 thousand feet of boards, planks, deals, etc., and 541,040 thousand shingles. Of the total value of wood and timber imports, \$5,956,568 were free and \$14,635,340 paid duty.

The wool imports consisted of 37,404,243 pounds of clothing, 12,631,283 pounds of combing, and 105,892,929 pounds of carpet wool; total, 155,928,455 pounds, valued at \$20,260,936. Of the first class, Australasia, direct or by way of Great Britain, furnished nearly two thirds and the Argentine Republic most of the remainder; of the second class, three quarters came from Great Britain and nearly a sixth from Canada; of the third class, Great Britain and Continental Europe between them supplied more than half, China nearly three tenths, and the Argentine Republic and Asiatic Turkey nearly all the rest. The imports of woollen cloths amounted to 4,924,106 pounds; of wool carpets, 904,206 square yards; of women's and children's dress goods, 25,343,998 square yards; of rags and shoddy, 435,854 pounds; of woollen yarns, 185,262 pounds; total value of woollen manufactures, \$16,164,446.

The importation of zinc and spelter was 2,998,116 pounds.

Of the total value of domestic merchandise exported in 1900, amounting to \$1,370,763,571, manufactures, \$433,851,756 in value, form 31.65 per cent.; mining products, \$37,843,742 in value, 2.76 per cent.; forest products, \$52,218,112 in value, 3.81 per cent.; fishery products, \$6,326,620 in value, 0.46 per cent.; and agricultural products, \$835,858,123 in value, 60.98 per cent.

The values of articles of domestic produce and manufacture exported in the year ending June 30, 1900, are given in the following table:

Agricultural implements:	Value.
Mowers and reapers, and parts of	\$11,343,763
Plows and cultivators, and parts of	2,178,099
All other	2,677,284
Aluminum, and manufactures of	244,091
Animals:	
Cattle	30,635,153
Hogs	394,814
Horses	7,612,616
Mules	3,919,478
Sheep	733,477
All other, including fowls	289,494
Art works	263,443
Bark, and extract of, for tanning	376,742
Beeswax	91,913
Billiard balls	1,108
Blacking:	
Stove polish	418,874
All other	462,234
Bones, hoofs, horns, and horn tips	199,194
Books, maps, engravings, and printed matter	2,943,495
Brass, and manufactures of	1,866,727
Breadstuffs:	
Barley	11,216,694
Bran, middlings, and mill feed	2,638,719

	Value.		Value.
Breadstuffs:		Glass and glassware:	
Bread and biscuit.....	988,513	Window glass.....	36,218
Buckwheat.....	254,847	All other.....	1,599,901
Corn.....	85,206,400	Glucose and grape sugar.....	3,600,139
Corn meal.....	2,148,410	Glue.....	225,844
Oats.....	12,504,654	Grease, grease scraps, and soap stock.....	2,944,322
Oatmeal.....	1,547,900	Gunpowder and other explosives:	
Rye.....	1,442,055	Gunpowder.....	197,438
Rye flour.....	14,757	All other explosives.....	1,694,166
Wheat.....	73,237,080	Hair, and manufactures of.....	676,688
Wheat flour.....	67,760,886	Hay.....	992,741
Preparations for table food.....	2,362,715	Hides and skins.....	804,674
All other.....	1,470,448	Honey.....	30,191
Bricks:		Hops.....	1,707,660
Building.....	116,128	Household and personal effects.....	2,606,059
Fire.....	400,358	Ice.....	29,501
Broom corn.....	182,520	India rubber, manufactures of:	
Brooms and brushes.....	232,968	Belting, hose, and packing.....	541,830
Candles.....	191,987	Boots and shoes.....	420,746
Cars, carriages, other vehicles, and parts of:		All other.....	1,609,005
Cars for steam railroads.....	2,558,328	India rubber, scrap and old.....	492,284
Cars for other railroads.....	984,854	Ink, printers' and other:	
Cycles, and parts of.....	8,533,149	Ink, printers'.....	145,321
All other carriages, and parts of.....	2,809,784	All other.....	114,455
Celluloid, and manufactures of.....	174,310	Instruments, scientific, including electric, telegraph, and telephone.....	6,435,706
Cement.....	163,162	Iron and steel, and manufactures of:	
Chemicals, drugs, dyes, and medicines:		Iron ore.....	79,042
Acids.....	147,233	Ferro-manganese.....	2,180
Ashes, pot and pearl.....	49,566	All other raw iron.....	3,122,573
Copper, sulphate of.....	2,120,745	Scrap and old.....	740,495
Dyes and dyestuffs.....	406,905	Bar iron.....	378,120
Ginseng.....	833,710	Steel wire rods.....	513,866
Limé, acetate of.....	776,413	Other rods or bars of steel.....	1,444,522
Medicines, patent or proprietary.....	2,909,153	Billets, ingots, and blooms.....	441,005
Roots, herbs, and barks.....	237,527	Iron rails.....	138,304
All other.....	5,540,358	Steel rails.....	9,218,144
Cider.....	64,233	Iron sheets and plates.....	549,975
Clay.....	166,385	Steel sheets and plates.....	1,249,576
Clocks and watches:		Tin plates, ternplates, etc.....	19,062
Clocks, and parts of.....	1,190,074	Structural iron and steel.....	2,335,588
Watches, and parts of.....	787,620	Wire.....	5,982,400
Coal and coke:		Locks, hinges, and builders' hardware.....	5,915,929
Anthracite coal.....	7,564,088	Saws.....	267,923
Bituminous coal.....	11,938,735	Tools not elsewhere specified.....	3,465,072
Coke.....	1,223,021	Car wheels.....	166,129
Coffee, cocoa, and chocolate	231,509	Castings not elsewhere specified.....	1,576,174
Copper, and manufactures of:		Cutlery, table.....	91,083
Ore.....	1,009,288	All other cutlery.....	206,712
Ingots, bars, plates, and old.....	55,772,166	Firearms.....	1,403,915
All other manufactures.....	2,080,704	Cash registers.....	813,096
Cork manufactures.....	29,204	Electrical machinery.....	4,840,992
Cotton, and manufactures of:		Laundry machinery.....	441,562
Sea island cotton.....	2,965,378	Metal-working machinery.....	7,193,390
Upland and other cotton.....	238,847,359	Printing presses, and parts of.....	1,210,774
Waste.....	1,156,241	Pumps and pumping machinery.....	3,112,525
Cloths, colored.....	4,889,401	Sewing machines.....	4,541,774
Cloths, uncolored.....	13,220,443	Shoe machinery.....	1,163,305
Wearing apparel.....	1,602,008	Fire engines.....	14,915
Cop and mill waste.....	610,120	Locomotive engines.....	5,592,403
All other manufactures.....	3,721,425	Stationary engines.....	673,197
Dental goods.....	247,462	Boilers and engine parts.....	1,767,856
Earthen, stone, and china ware:		Typewriting machines.....	2,697,544
Earthen and stone ware.....	519,480	All other machinery.....	21,913,202
China ware.....	57,213	Cut nails and spikes.....	647,711
Eggs.....	964,081	Wire nails.....	2,124,528
Feathers.....	280,709	All other nails and tacks.....	278,769
Fertilizers:		Pipe and fittings.....	7,024,868
Crude phosphates.....	6,376,367	Saws.....	140,637
All other.....	841,857	Scales and balances.....	536,040
Fibers, vegetable, manufactures of:		Stoves and ranges.....	535,285
Bags.....	397,740	All other manufactures.....	15,322,922
Cordage.....	927,805	Jewelry, and gold and silver work:	
Twine.....	2,646,482	Jewelry.....	892,327
All other.....	469,808	Gold and silver manufactures.....	251,311
Fish:		Lamps, chandeliers, etc.....	978,874
Fresh fish, other than salmon.....	59,734	Lead, and manufactures of:	
Dried or cured cod, haddock, etc.....	404,212	Pigs, bars, and old.....	14,081
Dried, smoked, or cured herring.....	82,407	Type.....	125,271
All other, dried, smoked, or cured.....	56,084	All other manufactures.....	191,705
Pickled mackerel.....	14,352	Leather, and manufactures of:	
All other, pickled.....	99,037	Sole leather.....	6,433,303
Canned salmon.....	2,603,648	Glazed kid.....	1,909,914
All other, fresh or cured.....	535,276	Patent or enameled.....	101,708
Caviare.....	100,796	Splits, buff, grain, and other upper.....	11,913,256
Oysters.....	807,243	All other leather.....	1,438,976
All other shellfish.....	416,212	Boots and shoes.....	4,276,656
All other fish and fish products.....	24,044	Harness and saddles.....	505,467
Fruits and nuts:		All other manufactures.....	713,730
Apples, dried.....	2,247,851	Lime.....	85,654
Apples, green or ripe.....	1,444,035	Malt.....	215,196
Oranges.....	271,468	Malt liquors:	
Prunes.....	1,646,332	In bottles.....	1,945,049
Raisins.....	139,699	In other coverings.....	194,157
All other, green, ripe, or dried.....	2,545,451	Marble and stone, and manufactures of:	
Canned fruits.....	3,127,278	Marble and stone.....	120,397
All other preserved fruits.....	63,448	Roofing slate.....	950,543
Nuts.....	156,490	All other manufactures.....	606,229
Furniture of metal.....	249,795	Matches.....	95,422
Furs and fur skins.....	4,503,068	Musical instruments:	
Ginger ale.....	4,930	Organs.....	933,309

	Value.		Value.
Musical instruments:		Sponges	32,199
Pianofortes.....	355,665	Starch	2,004,362
All other.....	609,906	Stationery, except of paper:	
Naval stores:		Mucilage.....	8,275
Rosin.....	3,796,367	Paste.....	1,733
Tar.....	77,062	Pencils.....	463,315
Turpentine and pitch.....	45,333	Pens and penholders.....	119,104
Turpentine, spirits of.....	8,554,922	Stereotype and electrotype plates.....	48,677
Nickel, nickel oxide, and matte.....	1,219,813	Straw and palm leaf, manufactures of.....	402,331
Nursery stock.....	107,173	Sugar and molasses:	
Oakum.....	30,474	Molasses.....	434,536
Oil cake and meal:		Sirup.....	1,683,202
Cotton seed.....	11,229,188	Sugar, brown.....	11,262
Linseed.....	5,536,331	Sugar, refined.....	1,004,135
Oilcloths:		Candy and confectionery.....	565,487
For floors.....	46,005	Teeth, artificial.....	86
All other.....	95,912	Tin, manufactures of.....	387,331
Oils:		Tobacco, and manufactures of:	
Lard oil.....	387,300	Leaf.....	20,163,086
Whale oil.....	24,766	Stems and trimmings.....	259,225
Fish oil.....	184,403	Cigars.....	74,023
All other animal oils.....	173,588	Cigarettes.....	2,290,876
Mineral oil, crude.....	7,364,162	Plug.....	2,624,870
Naphthas.....	2,010,802	All other manufactures.....	1,019,772
Illuminating oil.....	55,979,566	Toys	215,512
Lubricating and heavy paraffin.....	9,744,367	Trunks, valises, and traveling bags.....	119,777
Residuuum, including tar.....	506,853	Varnish.....	620,104
Corn oil.....	1,351,867	Vegetables:	
Cotton-seed oil.....	14,127,538	Beans and peas.....	983,401
Linseed oil.....	54,148	Onions.....	143,356
Peppermint, oil of.....	90,296	Potatoes.....	626,791
Other volatile or essential oils.....	166,434	Vegetables, canned.....	603,396
All other vegetable oils.....	554,781	All other, including pickles and sauces.....	496,542
Paints, pigments, and colors:		Vessels sold abroad:	
Carbon black, gas black, and lampblack.....	214,559	Steamers.....	181,653
Zinc, oxide of.....	474,396	Sailing vessels.....	21,395
All other.....	1,213,512	Vinegar.....	12,683
Paper, and manufactures of:		Whalebone.....	491,276
Paper hangings.....	145,992	Wine:	
Printing paper.....	2,521,330	In bottles.....	49,927
Writing paper and envelopes.....	463,248	In other coverings.....	575,963
All other.....	3,065,373	Wood, and manufactures of:	
Paraffin and paraffin wax.....	8,602,722	Timber, sawed.....	5,763,390
Perfumery and cosmetics.....	359,827	Timber, hewn.....	785,303
Photographic materials.....	1,386,129	Logs and other timber.....	5,090,471
Plated ware.....	509,776	Boards, deals, and planks.....	17,731,696
Platinum, and manufactures of.....	61,068	Joists and scantling.....	550,495
Provisions, comprising meat and dairy products:		Shingles.....	169,687
Beef, canned.....	5,233,932	Shooks, box.....	587,047
Beef, fresh.....	29,643,830	Shooks, other.....	728,738
Beef, salted or pickled.....	2,697,340	Staves.....	4,327,418
Beef, other cured.....	197,051	Heading.....	78,146
Tallow.....	4,398,204	All other lumber.....	3,613,190
Bacon.....	38,975,915	Doors, sashes, and blinds.....	1,132,510
Hams.....	20,410,367	Furniture.....	4,191,036
Pork, canned.....	653,402	Hogsheds and barrels.....	167,855
Pork, fresh.....	1,925,772	Trimmings, moldings, etc.....	428,185
Pork, salted or pickled.....	8,243,797	Wooden ware.....	981,938
Lard.....	41,389,164	Wood pulp.....	458,463
Lard compounds, and substitutes for.....	1,475,064	All other manufactures.....	3,872,851
Casings for sausages.....	2,307,571	Wool, and manufactures of:	
Mutton.....	64,313	Wool, raw.....	387,220
Oleo.....	10,503,956	Carpets.....	115,052
Oleomargarine.....	416,544	Dress goods.....	24,581
Poultry and game.....	463,905	Flannels and blankets.....	140,463
All other canned meats.....	1,724,064	Wearing apparel.....	570,289
All other meat products.....	3,941,394	All other manufactures.....	450,077
Butter.....	3,143,609	Yeast	8,066
Cheese.....	4,943,609	Zinc, and manufactures of:	
Milk.....	1,139,402	Zinc ore.....	960,930
Quicksilver	550,142	Pigs, bars, plates, and sheets.....	1,584,702
Quills	11,105	Manufactures of zinc.....	84,513
Rags	122,270	All other articles.....	3,928,413
Rice	500,364		
Rice bran, meal, and polish.....	167,023		
Salt.....	55,383		
Sand.....	38,380		
Seeds:			
Clover.....	2,379,372		
Cotton.....	346,230		
Flaxseed.....	3,475,417		
Timothy.....	505,758		
Other grass seeds.....	165,063		
All other.....	155,142		
Shells	96,382		
Silk, manufactures of	252,608		
Silk waste	53,851		
Soap:			
Toilet or fancy.....	494,406		
All other.....	1,279,618		
Spermaceti and spermaceti wax	67,125		
Spices, ground or prepared	19,131		
Spirits, distilled:			
Alcohol, wood.....	320,906		
Alcohol, all other.....	59,277		
Brandy.....	89,098		
Rum.....	903,806		
Whisky, bourbon.....	764,860		
Whisky, rye.....	121,241		
All other spirits.....	24,921		

Total value of domestic exports..... \$1,870,768,571

The exports of agricultural implements had a total value of \$16,099,149. The total value of live animals exported was \$43,585,031, representing 397,286 cattle, 51,180 hogs, 64,722 horses, 43,369 mules, 125,772 sheep, and some fowls and other animals. Nearly all the cattle, nearly half the horses, and three fifths of the sheep went to Great Britain.

The export of beeswax was 319,379 pounds. The total value of breadstuffs was \$262,744,078, representing 23,661,662 bushels of barley, 166,604 tons of bran and ground feed, 18,329,815 pounds of bread and biscuit, 426,822 bushels of buckwheat, 209,348,284 bushels of corn, 943,782 barrels of corn meal, 41,369,415 bushels of oats, 66,229,950 pounds of oatmeal, 2,355,792 bushels of rye, 4,370 barrels of rye flour, 101,950,389 bushels of wheat, 18,699,194 barrels of wheat flour and breakfast foods and

other farinaceous preparations, the export of which is growing rapidly. Of the corn exports, 192,519,785 bushels went to Europe, England taking 85,318,727 bushels, Germany 46,256,978 bushels, the Netherlands 23,584,536 bushels, Denmark 18,863,565 bushels, Belgium 9,618,054 bushels, and France 5,297,212 bushels, and what did not go to Europe was distributed among American countries. Of the wheat, 96,905,756 bushels went to Europe, 62,774,870 bushels of it to Great Britain, and the rest mainly to the Netherlands, Germany, Belgium, and Portugal. Of the wheat flour, Great Britain took 10,257,028 barrels, the Netherlands 1,300,602 barrels, the West Indies 1,723,887 barrels, South America 1,155,988 barrels, and Asia 2,225,169 barrels.

In the class of chemicals, drugs, dyes, and medicines the export of potash and pearlash was 1,273,905 pounds; of copper sulphate, 44,863,790 pounds; of ginseng, 160,901 pounds; of acetate of lime, 47,790,765 pounds. The export of anthracite coal was 1,777,319 tons; of bituminous coal, 5,411,329 tons. Of copper ore, 7,285 tons were exported, less than a fifth as much as in 1891, but nearly ten times as much of manufactured copper, the shipments of which amounted to 333,340,725 pounds. Of the exports of raw cotton, 6,090,144 bales, consisting of 18,199,987 pounds of sea island and 3,082,383,221 pounds of upland cotton, besides 25,642,400 pounds of waste, Europe took 2,868,207,089 of the 3,100,583,188 pounds, 1,151,045,166 pounds going to the United Kingdom, 809,586,393 pounds to Germany, 368,046,012 pounds to France, 221,975,537 pounds to Italy, and 123,306,186 pounds to Spain; and of the cotton that did not go to Europe, 161,601,219 pounds were shipped to Japan and Canada used 54,991,353 pounds. The exports of cotton cloth comprised 87,880,515 yards of colored goods and 264,314,474 yards of uncolored. The value of raw cotton exports was \$241,832,737 and of cotton manufactures \$24,003,087.

There were 5,920,727 dozen eggs exported, the export having increased twentyfold in four years.

The exports of fertilizers consisted of 776,220 tons of crude phosphates and 38,996 tons of commercial fertilizers. The cordage exports amounted to 8,441,995 pounds. The fish exports included 1,557,005 pounds of fresh fish, 9,739,573 pounds of dried cod, etc., 3,706,897 pounds of smoked or cured herring, 963,774 pounds of other smoked or dried fish, 1,142 barrels of salt mackerel, 20,693 barrels of other salt fish, and 27,082,370 pounds of canned salmon. The total value of fish exports was \$5,427,469. The quantities of dried fruits exported were 34,964,010 pounds of apples, 25,922,371 pounds of prunes, and 2,415,456 pounds of raisins, besides peaches, apricots, and others not specified; the quantity of fresh apples, 526,636 barrels; total value of fruits and nuts, \$11,642,662.

The export of glucose was 221,901,450 pounds; of glue, 2,349,014 pounds; of gunpowder, 1,612,822 pounds.

The export of hay was 72,716 tons. Of hides, 7,486,256 pounds were shipped abroad. The hop exports were 12,639,474 pounds.

The exportation of India-rubber boots and shoes has steadily increased, amounting in 1900 to 767,104 pairs. The total value of rubber manufactures was \$2,631,641. The export of iron ore was 40,510 tons. Of raw iron, 160,674 tons were sent abroad; of scrap and old iron, 48,111 tons. The exportation of bar iron was 18,456,435 pounds; of steel rods for wire, 25,953,749 pounds; of other rods, 73,075,212 pounds; of billets, ingots, and blooms, 14,109 tons; of hoop, band, and scroll iron, 2,947,464 pounds; of iron rails, 6,149 tons; of steel rails, 341,656 tons; of iron sheets and plates,

18,181,278 pounds; of steel sheets and plates, 79,525,672 pounds; of tin plates, 319,579 pounds; of structural iron and steel, 56,275 tons; of wire, 236,772,806 pounds. The number of car wheels was 25,518; of safes, 2,374; of steam fire engines, 4; of locomotive engines, 525; of stationary engines, 1,140. The quantity of cut nails and spikes was 24,915,866 pounds; of wire nails, 84,035,469 pounds; of miscellaneous nails, 4,341,249 pounds. The total value of iron and steel exports was \$121,913,548, of which machinery alone made \$55,485,495.

The export of lead was 308,509 pounds; of type, 356,442 pounds. The quantity of sole leather exported was 34,060,296 pounds. Of boots and shoes, 11,913,256 pairs were sold abroad. The total value of leather exports was \$27,293,010. The export of lime was 81,647 barrels.

The export of malt was 296,742 bushels, and of beer 1,578,240 dozen bottles and 761,411 gallons. The number of organs taken abroad was 16,182, and of pianofortes 1,760; total value of musical instruments, \$1,958,779.

The exports of naval stores, of the total value of \$12,474,194, were 2,369,118 barrels of rosin, 36,535 barrels of tar, 20,246 barrels of turpentine and pitch, and 18,090,582 gallons of spirits of turpentine. Of nickel and oxide the export was 5,317,677 pounds.

Shipments of oil cake and meal were 1,143,704,342 pounds of cotton seed and 483,130,182 of flaxseed. The export of lard oil was 738,724 gallons, and of whale oil 60,214 gallons, both diminishing quantities; of fish oil, 795,642 gallons; of other animal oils, 381,161 gallons; total value of animal oils, \$718,997. The exports of mineral oils were 133,023,656 gallons of crude or natural oils of all kinds, without regard to gravity; 21,988,093 gallons of naphthas, including all the lighter products of distillation; 721,027,637 gallons of illuminating oil; 74,583,769 gallons of lubricating and heavy paraffin oil; and 395,933 barrels of residuum, including tar and all other from which the lighter bodies have been distilled. The total value of mineral oils was \$75,611,750. Of the total exports of illuminating oil, 506,651,963 gallons went to Europe, the largest quantities being 146,477,760 gallons to the United Kingdom, 124,542,723 gallons to Germany, 121,135,337 gallons to the Netherlands, and 43,675,550 gallons to Belgium; 17,586,808 gallons went to Canada and other parts of North America and the West Indies; 39,930,195 gallons went to Brazil, the Argentine Republic, and other parts of South America; 126,781,065 gallons went to Japan, China, and other Asiatic countries; 20,788,133 gallons went to Australasia and the Pacific islands; and 5,981,035 went to South Africa and 3,307,838 to other parts of Africa. The exports of corn oil were 4,383,926 gallons; of cotton-seed oil, 46,902,390 gallons; of linseed oil, 103,494 gallons; of oil of peppermint, 80,558 pounds; total value of vegetable oils, \$16,345,056.

The exports of paints and colors were valued at \$1,902,367. The quantity of zinc oxide was 11,895,590 pounds. Paper exports amounted in value to \$6,215,833, two fifths of it coming from 99,308,300 pounds of printing paper. The export of paraffin wax was 182,163,718 pounds. Under the head of provisions, the exports were 55,533,745 pounds of canned beef, 329,078,609 pounds of fresh beef, 47,306,513 pounds of pickled beef, 2,310,165 pounds of beef cured otherwise, 89,030,943 pounds of tallow, 512,153,729 pounds of bacon, 190,414,412 pounds of hams, 8,496,074 pounds of canned pork, 25,946,905 pounds of fresh pork, 133,199,683 pounds of salted or pickled pork, 661,813,663 pounds of lard, 25,852,685 pounds of lard compounds and sub-

stitutes, such as cottolene and lardine, 773,760 pounds of mutton, 146,739,681 pounds of margarine oil, 4,256,067 pounds of oleomargarine or imitation butter, 18,266,371 pounds of butter, and 48,419,353 pounds of cheese. Of the canned beef, 32,273,374 pounds were shipped to Great Britain out of 39,565,952 pounds taken by Europe, 1,726,418 pounds to North American countries, and 11,241,395 pounds to South Africa; of fresh beef, 324,260,115 pounds were sent to England; of pickled and salted beef, 18,125,780 pounds to England, 5,827,031 pounds to Germany, and 11,419,805 pounds to British colonies in America and other parts of North America; of salted and pickled pork, 88,197,070 pounds went to Europe, two thirds of it to England and to Germany an eighth, and 40,231,487 pounds went to North America; of tallow, 82,712,822 pounds to Europe, England taking 43,514,592 pounds, and Germany, France, and Holland each a goodly share; of lard, 573,641,735 pounds were consumed in Europe, Great Britain taking 217,486,742 pounds and Germany 195,595,578 pounds, and the part that was not absorbed by Europe was distributed throughout North and South America; of bacon, 393,680,472 pounds went to the United Kingdom, 26,027,162 pounds to Germany, 27,812,949 pounds to Belgium, 12,221,663 pounds to France, 12,306,661 pounds to Cuba, 11,488,396 pounds to Sweden and Norway, and 10,094,324 pounds to Italy; of hams, Great Britain took 165,761,659 pounds, Belgium 8,570,337 pounds, and Cuba 7,087,793 pounds; of butter, 11,082,044 pounds went to England, 3,846,226 pounds mainly to British America and the West Indies, and 2,287,157 pounds to South America; of cheese, 44,021,088 pounds were sent to the United Kingdom and the rest to British America and the West Indies except a small fraction sent to other American countries. The total value of provisions was \$184,453,055.

The export of quicksilver was 1,071,585 pounds.

The shipments of rice were 12,947,009 pounds; of rice bran, meal, and polish, 28,110,408 pounds.

The salt export was 12,731,919 pounds. Of the seeds, valued at \$7,036,982, the quantities given are 32,069,371 pounds of clover seed, 49,855,238 pounds of cotton seed, 2,743,266 bushels of flaxseed, and 15,078,186 pounds of timothy. Soap exports were, exclusive of toilet soap, 36,239,193 pounds. The export of spermaceti was 235,781 pounds. The exports of distilled spirits, valued at \$2,278,111, were 540,799 gallons of wood alcohol, reduced to proof, 177,974 gallons of alcohol, including pure, neutral, or cologne spirits, 80,259 gallons of brandy, 670,410 gallons of rum, 863,241 gallons of bourbon whisky, 91,721 gallons of rye whisky, and 18,585 gallons of other spirits. The exportation of starch was 124,935,963 pounds. The value of sugar exports was \$2,697,671, including 3,892,374 gallons of molasses, 11,139,770 gallons of sirup, 322,252 pounds of brown sugar, and 22,192,351 pounds of refined sugar.

The exports of leaf tobacco amounted to 334,604,210 pounds; of stems and trimmings, 10,051,487 pounds; of cigars, 2,579 thousand; of cigaretttes, 1,164,356 thousand; of plug, 12,198,474 pounds; total value of tobacco exports, \$35,432,512. Of the leaf tobacco, 121,793,251 pounds were sent to the United Kingdom, 52,525,167 pounds to Germany, 38,584,488 pounds to France, 38,372,301 pounds to Italy, 10,932,942 pounds to the Netherlands, 17,122,797 pounds to Belgium, 13,772,478 pounds to Spain, and 9,955,645 pounds to Canada.

The export of varnish was 588,545 gallons. The exports of fresh vegetables were 617,355 bushels of beans and peas, 171,636 bushels of onions, 809,472

bushels of potatoes, the total value, including canned and pickled, being \$2,853,278. The tonnage of vessels sold abroad was for steamers 1,032 and for sailing vessels 687 tons.

The export of whalebone was 196,001 pounds. Wine exports were valued at \$625,992, consisting of 9,854 dozens of bottled wine and 1,408,859 gallons in casks. The total value of timber and wood manufactures was \$50,598,416, including 473,542 thousand feet of sawed timber, 4,416,741 cubic feet of hewn timber, 1,046,758 thousand feet of boards, 41,043 thousand feet of joists and scantling, 86,118 thousand shingles, 773,019 shooks, 49,011,533 staves, and 28,554,801 pounds of wood pulp. The quantity of raw wool exported was 2,200,309 pounds; the value of wool manufactures was \$1,300,362, including 146,113 yards of carpet, 38,166 yards of dress goods, and blankets, clothing, and various other manufactures.

The export of zinc ore was 32,101 tons; of manufactured zinc, 31,847,685 pounds; value of zinc and manufactures thereof, excluding ore, \$1,669,215.

The merchandise imports from the various foreign countries in the year ending June 30, 1900, had the following values:

COUNTRIES.	Dues.	Dutiable.	Total.
<i>Europe.</i>			
Austria-Hungary.....	\$1,467,890	\$7,611,798	\$9,079,687
Azores and Madeira.....	8,598	10,893	19,491
Belgium.....	4,742,643	8,198,163	12,940,806
Denmark.....	840,902	579,553	1,420,455
France.....	14,175,000	59,887,085	73,012,085
Germany.....	21,427,132	78,947,578	97,374,700
Gibraltar.....	85,169	5,037	90,206
Greece.....	129,040	998,815	1,122,855
Greenland, Iceland, and Färöes.....	78,658		78,658
Italy.....	15,349,818	12,574,358	27,924,176
Netherlands.....	4,562,800	11,290,324	15,853,224
Portugal.....	8,898,827	854,389	9,753,216
Roumania.....	18,897	85,145	104,042
Russia.....	4,564,739	2,661,234	7,225,973
Serbia.....	9,034	902	10,936
Spain.....	1,871,230	4,078,810	5,950,040
Sweden and Norway..	587,662	3,896,620	4,484,282
Switzerland.....	580,537	16,812,731	17,393,268
Turkey in Europe.....	1,245,287	2,665,579	3,910,866
United Kingdom:			
England.....	51,964,298	61,992,126	113,956,424
Scotland.....	846,036	14,760,103	15,606,139
Ireland.....	92,024	10,626,982	10,719,006
Total Europe.....	\$127,155,022	\$312,412,292	\$440,567,314
<i>North America.</i>			
British Honduras.....	\$181,292	\$16,748	\$198,040
British North America:			
Nova Scotia, New Brunswick, and Prince Edward Island.....	1,600,897	4,011,976	5,612,873
Quebec, Ontario, and Northwest Territory.....	8,606,419	19,211,509	27,817,928
British Columbia.....	1,936,036	8,943,177	10,879,213
Newfoundland and Labrador.....		228,890	228,890
Central America:			
Costa Rica.....	2,002,816	77,214	2,080,030
Guatemala.....	2,290,672	163,306	2,453,978
Honduras.....	925,037	62,669	987,706
Nicaragua.....	1,398,919	151,347	1,550,266
Salvador.....	672,024	63,730	735,754
Mexico.....	23,956,046	5,349,007	29,305,053
Miquelon and St. Pierre.....	624	66,077	66,701
West Indies:			
British and Bermuda.....	5,402,533	6,028,648	11,431,181
Cuba.....	1,854,873	29,517,331	31,372,204
Danish.....	13,217	555,718	568,935
Dutch.....	168,490	47,696	216,186
French.....		26,996	26,996
Hayti.....	1,164,880	19,971	1,184,851
Puerto Rico.....	61,710	2,016,938	2,078,648
Santo Domingo.....	272,363	3,408,080	3,680,443
Total North America.....	\$53,987,990	\$77,047,241	\$131,035,231

COUNTRIES.	Free.	Dutiable.	Total.
<i>South America.</i>			
Argentine Republic...	\$2,010,804	\$6,103,440	\$8,114,304
Bolivia.....	26	.....	26
Brazil.....	55,204,311	2,999,146	58,073,457
Chile.....	6,845,326	207,500	7,112,826
Colombia.....	3,723,736	584,079	4,307,814
Ecuador.....	1,397,866	127,022	1,524,878
Guiana:			
British.....	13,920	3,781,438	3,795,358
Dutch.....	854,404	875,918	1,230,412
French.....	87,552	.....	87,554
Peru.....	685,208	1,487,275	2,192,543
Uruguay.....	321,306	1,536,769	1,848,077
Venezuela.....	4,967,673	1,182,846	6,500,019
Total South America	\$75,411,829	\$18,254,945	\$93,666,774
<i>Asia.</i>			
Aden.....	\$1,557,795	\$4,550	\$1,542,895
China.....	14,406,238	12,400,043	26,896,236
East Indies:			
British.....	30,785,256	14,570,730	45,355,976
Dutch.....	3,695,043	24,191,771	27,886,814
French.....	4	.....	4
Portuguese.....	.....	539	539
Hong-Kong.....	435,159	821,108	1,256,267
Japan.....	20,566,198	12,182,704	32,748,903
Korea.....	105	.....	105
Asiatic Russia.....	245	793	1,008
Turkey in Asia.....	1,581,859	2,941,512	3,223,371
All other Asia.....	250,410	70,074	320,093
Total Asia	\$73,357,356	\$36,484,974	\$109,842,330
<i>Oceania.</i>			
British Australasia.....	\$1,919,184	\$3,549,012	\$5,468,196
French Oceania.....	436,745	959	437,707
Hawaii.....	20,639,613	18,200	20,707,803
Philippine Islands.....	5,031,989	939,219	5,971,208
All other Oceania.....	2,023,627	467	2,024,094
Total Oceania	\$30,108,161	\$4,507,947	\$34,616,108
<i>Africa.</i>			
British Africa.....	\$273,243	\$765,989	\$1,039,132
Canary Islands.....	13,701	2,906	21,607
French Africa.....	551,379	106,847	657,226
Liberia.....	2,936	.....	2,936
Madagascar.....	.....	4,061	4,061
Portuguese Africa.....	10,331	931	17,313
Spanish Africa.....	750	.....	750
Turkey in Africa:			
Egypt.....	6,398,920	1,909,102	8,278,022
Tripoli.....	25,356	148,441	174,297
All other Africa.....	693,352	59,692	1,023,044
Total Africa	\$8,221,518	\$2,996,919	\$11,218,437
Total imports	\$367,286,866	\$482,704,318	\$849,941,184

The total value of imports from the United Kingdom was \$159,582,401, of which \$52,804,130 were free and \$106,778,271 dutiable. The total from the Dominion of Canada and Newfoundland was \$39,931,833, of which \$12,431,242 were free and \$27,500,591 dutiable. Of the total imports, 51.84 per cent. came from Europe, 15.30 per cent. from North America, 11.02 per cent. from South America, 16.45 per cent. from Asia, 4.07 per cent. from Oceania, and 1.32 per cent. from Africa.

The imports into the United States from Cuba, Porto Rico, Hawaii, and the Philippine and Samoan Islands for the year ending June 30, 1900, amounted to over \$60,000,000, of which over \$40,000,000 were for sugar and molasses, \$10,000,000 for tobacco, \$5,000,000 for vegetable fibers, \$1,000,000 for iron, copper, and manganese, and \$4,000,000 for miscellaneous products, including coffee, cacao, sponges, tropical fruits, vegetables, hides and skins, and cabinet woods. One third of the sugar imports came from these dependencies. The imports from Cuba, according to the provisional reports, were sugar of the value of \$16,022,983; unmanufactured tobacco, \$7,298,946; molasses, \$437,776; iron ore, \$737,287; cabinet woods, \$348,504; fruit, \$261,109; copper, \$248,028; manganese ore, \$246,148; cacao, \$164,570; sponges,

\$105,297; vegetables, \$41,919; bones, horns, and hoofs, \$37,212; vegetable fibers, \$30,755; scrap iron, \$32,221; hides and skins, \$27,030; coffee, \$2,141. The imports from Porto Rico were sugar of the value of \$1,403,699; molasses, \$197,837; tobacco, \$181,147; coffee, \$9,859; hides and skins, \$8,595; fruit, \$2,026; tobacco, \$4,632; cabinet woods, \$452; cacao, \$154; other products, \$100. The imports from the Philippines were Manila hemp of the value of \$4,286,359; sugar, \$925,335; scrap iron, \$1,354; tobacco, \$833; fruit, \$40. The imports from Hawaii were sugar of the value of \$19,055,874; coffee, \$64,386; hides and skins, \$63,335; fruit, \$34,274; vegetables, \$29,306; scrap iron, \$500; tobacco, \$26.

The values of the merchandise exports to different countries in the year 1900 are given in the table below.

The exports to the United Kingdom amounted to \$533,819,545, the exports of domestic merchandise being \$527,784,340 and of foreign merchandise \$6,035,205. The exports to British North America as a whole were \$97,337,494, of which

COUNTRIES.	Domestic.	Foreign.	Total.
<i>Europe.</i>			
Austria-Hungary.....	\$6,894,972	\$219,847	\$7,046,819
Azores and Madeira.....	412,488	1,025	414,113
Belgium.....	47,794,330	550,725	48,307,011
Denmark.....	15,469,177	18,514	15,487,991
France.....	31,998,809	1,841,188	32,385,097
Germany.....	184,648,004	2,699,796	187,347,999
Gibraltar.....	500,152	.....	500,152
Greece.....	290,709	.....	290,709
Greenland, Iceland, and Faröes.....	4,764	1,241	6,005
Italy.....	33,050,005	197,615	33,250,620
Netherlands.....	89,116,243	270,494	89,386,076
Portugal.....	5,596,542	.....	5,596,542
Roumania.....	41,563	.....	41,563
Russia.....	7,423,452	14,386	7,438,817
Servia.....	171,309	4,425	175,734
Spain.....	13,336,627	14,053	13,399,680
Sweden and Norway.....	10,428,597	3,870	10,432,467
Switzerland.....	249,727	750	250,477
Turkey in Europe.....	340,357	.....	340,357
United Kingdom:			
England.....	455,307,870	5,854,544	461,062,414
Scotland.....	40,065,928	173,738	40,244,685
Ireland.....	32,510,578	1,928	32,512,506
Total Europe	\$1,028,799,341	\$11,874,422	\$1,040,167,763
<i>North America.</i>			
British America:			
Nova Scotia, New Brunswick, and Prince Edward Island.....	\$6,095,347	\$352,364	\$6,447,711
Quebec, Ontario, Manitoba, and Northwestern Territory.....	76,264,343	6,745,396	83,009,739
British Columbia.....	5,670,646	191,874	5,862,530
Newfoundland and Labrador.....	2,014,920	2,604	2,017,524
British Honduras.....	607,068	8,469	615,532
Central America:			
Costa Rica.....	1,412,012	50,343	1,462,355
Guatemala.....	764,642	20,820	785,462
Honduras.....	1,134,398	47,055	1,181,453
Nicaragua.....	1,606,995	210,874	1,817,869
Salvador.....	673,273	6,167	679,440
Mexico.....	33,708,996	1,270,965	34,974,961
Miquelon and St. Pierre.....	178,141	3,246	179,367
West Indies:			
British and Bermuda.....	9,905,793	113,376	10,019,169
Cuba.....	25,236,808	1,376,592	26,513,400
Danish.....	622,145	2,379	624,524
Dutch.....	579,897	2,296	582,193
French.....	1,947,743	19,425	1,967,168
Hayti.....	2,796,894	199,859	2,996,689
Porto Rico.....	4,260,892	379,557	4,640,449
Santo Domingo.....	1,237,135	79,963	1,317,098
Total N. America	\$176,611,003	\$10,968,622	\$187,594,625

COUNTRIES.	Domestic.	Foreign.	Total.
<i>South America.</i>			
Argentine Republic.....	\$11,268,222	\$294,915	\$11,558,237
Bolivia.....	59,222	.....	59,222
Brazil.....	11,481,094	97,025	11,578,119
Chili.....	3,282,761	4,811	3,287,565
Colombia.....	2,608,289	42,369	2,710,888
Ecuador.....	1,215,064	944	1,216,008
Gulana:			
British.....	1,882,218	32,974	1,915,192
Dutch.....	487,145	6,840	493,985
French.....	187,972	1,938	189,910
Paraguay.....	4,884	.....	4,884
Peru.....	1,638,060	4,415	1,662,475
Uruguay.....	1,745,705	71,015	1,816,720
Venezuela.....	2,401,910	50,947	2,452,757
Total S. America.....	\$38,837,547	\$608,116	\$38,945,763
<i>Asia.</i>			
Aden.....	\$1,490,094	\$149	\$1,490,343
China.....	15,213,285	45,982	15,259,167
East Indies:			
British.....	4,892,690	9,632	4,902,322
Dutch.....	1,533,302	847	1,534,149
French.....	207,587	.....	207,587
Hong-Kong.....	8,475,430	10,548	8,485,978
Japan.....	29,042,536	44,989	29,087,475
Korea.....	126,965	.....	126,965
Russia, Asiatic.....	3,046,067	3,185	3,050,102
Turkey in Asia.....	225,963	692	226,655
All other Asia.....	523,556	29,507	553,163
Total Asia.....	\$64,768,475	\$145,332	\$64,913,807
<i>Oceania.</i>			
British Australasia.....	\$36,568,784	\$141,918	\$36,726,708
French Oceania.....	513,860	9,178	523,138
Hawaii.....	13,077,506	481,642	13,559,148
Philippine Islands.....	2,035,624	4,585	2,040,449
All other Oceania.....	192,536	.....	192,536
Total Oceania.....	\$42,808,712	\$587,568	\$43,391,275
<i>Africa.</i>			
British Africa.....	\$16,256,194	\$13,298	\$16,269,492
Canary Islands.....	237,562	1,144	238,706
French Africa.....	508,814	2,371	601,185
Liberia.....	25,048	.....	25,048
Madagascar.....	10,235	.....	10,235
Portuguese Africa.....	798,636	3,588	802,164
Turkey in Africa:			
Egypt.....	1,006,486	125	1,006,611
Tripoli.....	50	.....	50
All other Africa.....	427,366	.....	427,366
Total Africa.....	\$19,449,293	\$30,456	\$19,469,849
Total exports.....	\$1,370,763,671	\$23,719,511	\$1,394,483,068

\$90,045,256 were domestic and \$7,292,238 foreign exports. Of the total exports, 74.60 per cent. went to Europe, 13.45 per cent. to North America, 2.79 per cent. to South America, 4.66 per cent. to Asia, 3.11 per cent. to Oceania, and 1.39 per cent. to Africa.

The value of merchandise received from foreign countries for immediate transit across United States territory in 1900 was \$98,551,462. Of the total value of imports, \$44,412,509 came by land vehicles, \$104,304,940 by sea in American vessels, and \$701,223,735 in foreign vessels. Of the total exports, \$110,483,141 went by land, \$90,779,252 in American vessels, and \$1,193,220,689 went in foreign vessels. The percentage of the carrying trade that was taken in American vessels was 12.9 per cent. of the imports and 7.1 per cent. of the exports by sea; of the whole sea-borne trade, which amounted to \$2,089,528,616, the proportion that was conveyed in American vessels was computed at 9.3 per cent.

The value of imported merchandise entered for consumption during the fiscal year 1900 was \$830,519,252, of which \$366,759,922, 44.16 per cent. of the whole, was the value of free imports and \$463,759,330 that of dutiable merchandise, on which \$229,360,771 of duties were collected, an average

rate of 49.46 per cent. on dutiable and of 27.62 per cent. on free and dutiable merchandise together. The consumption of imported merchandise was \$10.88 per capita, and the duty collected \$3.01 per capita. Articles of food and live animals, forming 26.02 of the total imports and having a value of \$216,107,303, of which \$91,128,161 represent free and \$124,979,142 dutiable imports, paid \$78,236,070 in duties, 34.26 per cent. of all duties collected, the average rate collected on this class being 62.60 per cent. ad valorem. Articles in a crude condition which enter into the various processes of domestic industry had a value of \$299,351,033, being 36.04 per cent. of the total value of imports entered for consumption, and in this class the value of \$241,835,502 was free merchandise, while on \$57,515,531 duties were collected, at the average rate of 28.96 per cent. ad valorem, to the amount of \$15,508,205, being 6.79 per cent. of the total collections. Articles wholly or partially manufactured for use as materials in the manufactures and mechanic arts had a value of \$80,575,042, which was 9.70 per cent. of the total imports consumed, \$17,824,360 of this class being duty free and \$62,750,682 paying \$17,092,946 in duties, an average rate of 27.24 per cent., giving 7.48 per cent. of the whole tariff revenue. Of articles manufactured and ready for consumption, \$130,577,155 in value, forming 15.72 per cent. of the total imports, \$10,479,846 were free and \$120,097,309 dutiable, paying at the average rate of 51.02 per cent. ad valorem \$61,270,378, or 26.83 per cent. of all duties collected. The value of articles of voluntary use and luxuries was \$103,908,719, 12.51 per cent. of all importations, of which sum \$5,492,053 were free of duty and \$98,416,666 paid an average rate of 57.16 per cent. and yielded \$56,256,957, that being 24.63 per cent. of the total duty that was collected.

The imports of silver, including ore, in 1900, were \$35,256,302 in coining value, and the exports were \$52,464,345 of domestic and \$4,247,930 of foreign, giving an excess of exports of \$21,455,973. The value of silver imported in ore was \$24,219,950. The imports of gold coin and bullion in 1900 were \$44,573,164, and the exports were \$48,266,759, of which \$46,693,893 were domestic and \$1,572,866 foreign. The excess of exports was \$3,693,575, while in 1899 there was an excess of imports amounting to \$51,432,517.

The production of gold from mines in the United States in 1899, according to the report of the Director of the Mint, was 3,437,210 ounces, or in value \$71,053,400, of which \$25,982,800 came from Colorado, \$15,197,800 from California, \$6,469,500 from South Dakota, \$5,459,500 from Alaska, \$4,760,100 from Montana, \$3,450,800 from Utah, \$2,566,100 from Arizona, \$2,219,000 from Nevada, \$1,889,000 from Idaho, \$1,429,500 from Oregon, \$685,400 from Washington, \$584,100 from New Mexico, \$160,100 from South Carolina, \$113,000 from Georgia, \$34,500 from North Carolina, and \$52,200 from Texas, Michigan, and other States. The production of silver in the United States was reported to be 54,764,000 ounces, having a commercial value of \$32,859,000 and a coining value of \$70,806,000, of which Colorado produced \$29,301,527, Montana \$20,810,990, Utah \$9,171,135, Arizona \$2,040,630, Nevada \$1,090,457, California \$1,065,762, Texas \$672,323, New Mexico \$650,731, Washington \$330,990, South Dakota \$188,251, Alaska \$181,140, Oregon \$173,641, Michigan \$145,843, and Georgia, South Carolina, North Carolina, and other States \$3,201.

Banking and Currency.—The amount of money in circulation on July 1, 1900, was reported by the Secretary of the Treasury to be \$2,055,-

150,998, equal to \$26.94 per capita. It consisted of \$1,442,247,405 of currency of all descriptions and \$612,903,593 of certificates against which an equivalent of the appropriate kinds of money was held in the Treasury for redemption on demand. The total was made up of \$610,806,472 of gold coin, \$200,733,019 of gold certificates, \$65,889,346 of standard silver dollars, \$408,465,574 of silver certificates, \$76,160,988 of subsidiary coin, \$3,705,000 of currency certificates, \$313,971,545 of United States notes, \$300,115,112 of national bank notes, and \$75,303,942 of fractional currency. The money in the Treasury, exclusive of the sums against which certificates had been issued, was \$284,549,675, made up of \$222,844,953 of gold coin and bullion, \$15,749,107 of standard silver dollars, \$6,702,754 of subsidiary coin, \$29,004,471 of United States notes, \$9,525,332 of national bank notes, and \$723,058 of fractional currency. The amounts of the various kinds of money in the country were \$103,384,444 of gold, \$408,465,574 of standard silver dollars, \$82,863,742 of subsidiary coin, \$346,681,016 of United States notes, \$309,640,444 of national bank notes, and \$76,027,000 of fractional currency. The coinage of the United States mints in 1899 was \$111,344,220 of gold, \$26,061,519 of standard silver dollars, and \$1,837,451 of minor coins; total, \$139,243,191.

There were 3,871 national banks doing business on Sept. 5, 1900, having \$3,281,000,000 of deposits net, against which they held reserves amounting to \$983,300,000, or 29.7 per cent., the legal reserve being \$684,100,000, their reserves consisting of \$518,400,000 of lawful money, \$450,700,000 due from agents, and \$14,200,000 redemption fund. The resources and liabilities of the banks, according to the report of the Comptroller of the Currency, were on that date as follow:

Resources:	
Loans.....	\$3,709,900,000
Bonds for circulation.....	294,900,000
Other United States bonds.....	118,900,000
Stocks and securities.....	307,300,000
Due from banks.....	736,400,000
Real estate.....	26,000,000
Specie.....	573,300,000
Legal tender notes.....	145,000,000
National bank notes.....	25,400,000
Clearing-house exchanges.....	194,500,000
United States certificates.....	2,100,000
Due from United States Treasurer	15,900,000
Other resources.....	118,500,000
Total resources.....	\$5,048,100,000
Liabilities:	
Capital stock.....	\$630,300,000
Surplus fund.....	251,900,000
Undivided profits.....	127,600,000
Circulation.....	239,900,000
Due to depositors.....	2,508,300,000
Due to banks.....	1,096,600,000
Other liabilities.....	139,600,000
Total liabilities.....	\$5,048,100,000

The specie and coin certificates held by the national banks consisted of \$103,752,172 of gold coin, \$115,018,140 of Treasury certificates, \$93,390,000 of clearing-house certificates, \$8,782,306 of silver dollars, \$7,144,233 of fractional coin and \$45,243,559 of silver certificates; total, \$373,328,410.

The resources and liabilities of 1,002 savings banks were reported as follow:

Resources:	
Loans on real estate.....	\$914,066,518
Loans on other securities.....	253,719,188
United States bonds.....	111,118,450
State and other stocks and bonds.....	518,971,965
Railroad bonds and stocks.....	290,488,662
Bank stock.....	34,607,547
Real estate.....	56,651,224
Other investments.....	364,572,439
Due from banks.....	118,562,042
Cash.....	32,115,609
Total resources.....	\$2,624,883,634

Liabilities:	
Deposits.....	\$2,386,719,954
Surplus fund.....	184,919,283
Undivided profits.....	21,907,662
Capital stock, etc.....	38,286,755
Total liabilities.....	\$2,624,873,654

There were 6,107,083 depositors having \$2,449,547,885 of savings deposits, of which \$939,790,300 were in the Eastern, \$1,148,691,356 in the Middle, \$14,840,199 in the Southern, \$185,806,444 in the Western, and \$160,419,586 in the Pacific States.

Navigation.—The tonnage of vessels entered from foreign countries at the seaports of the United States during the year ending June 30, 1900, was 23,533,597 tons, of which 3,974,239 tons were American and 19,559,358 tons foreign. The tonnage of sailing vessels entered was 3,245,874 tons, of which 923,561 tons were American and 2,322,313 tons foreign; the steam tonnage was 20,287,723 tons, of which 3,050,678 tons were American and 17,237,045 tons foreign. The tonnage of vessels cleared for foreign countries during the fiscal year 1900 was 23,617,658 tons, of which 4,006,114 tons were American and 19,611,544 tons foreign. The tonnage of sailing vessels cleared was 3,298,691 tons, of which 958,489 tons were American and 2,340,202 tons foreign. The steam tonnage cleared was 20,318,967 tons, of which 3,047,625 tons were American and 17,271,342 tons foreign. During the year 783,375 tons were entered from and 832,434 tons cleared for Belgium, 642,654 tons entered from and 1,011,322 tons cleared for France, 2,334,042 tons entered from and 2,706,337 tons cleared for Germany, 798,380 tons entered from and 538,957 tons cleared for Italy, 868,657 tons entered from and 1,303,168 tons cleared for the Netherlands, 443,420 tons entered from and 212,350 tons cleared for Spain, 7,015,528 tons entered from and 7,047,998 tons cleared for the United Kingdom, 1,214,476 tons entered from and 1,301,780 tons cleared for Nova Scotia, New Brunswick, and Prince Edward Island, 1,469,610 tons entered from and 1,405,052 tons cleared for British Columbia, 375,268 tons entered from and 320,518 tons cleared for Central American states, 638,675 tons entered from and 532,397 tons cleared for Mexico, 705,760 tons entered from and 696,485 tons cleared for the British West Indies and British Honduras, 1,341,928 tons entered from and 1,247,752 tons cleared for Cuba, 73,658 tons entered from and 257,765 tons cleared for the Argentine Republic, 500,595 tons entered from and 245,574 tons cleared for Brazil, 336,366 tons entered from and 307,384 tons cleared for Colombia, 132,465 tons entered from and 77,778 tons cleared for British India, 394,801 tons entered from and 456,069 tons cleared for China, 272,491 tons entered from and 256,820 tons cleared for Japan, 141,922 tons entered from and 298,514 tons cleared for Australia and New Zealand, 367,686 tons entered from and 274,769 tons cleared for Hawaii, 157,587 tons entered from and 281,897 tons cleared for British possessions in Africa and adjacent islands, and 2,524,253 tons entered from and 1,944,538 tons cleared for all other countries. Of the total tonnage of American and foreign vessels in foreign commerce entered and cleared 8,176,761 tons were entered and 7,843,529 tons cleared at the port of New York, 2,236,066 tons entered and 1,009,121 tons cleared at Boston, 1,850,656 tons entered and 1,885,959 tons cleared at Philadelphia, 1,677,385 tons entered and 1,775,269 tons cleared at Baltimore, 1,075,434 tons entered and 1,729,008 tons cleared at New Orleans, 1,351,718 tons entered and 1,330,648 tons cleared at San Francisco, 1,103,797 tons entered and

1,173,523 tons cleared at Puget Sound, 724,666 tons entered and 810,834 tons cleared at Galveston, 520,153 tons entered and 595,220 tons cleared at Pensacola, 549,198 tons entered and 505,273 tons cleared at Mobile, 458,105 tons entered and 636,622 tons cleared at Newport News, 344,082 tons entered and 372,919 tons cleared at Portland, Me., 200,593 tons entered and 392,294 tons cleared at Norfolk and Portsmouth, Va., 267,568 tons entered and 343,555 tons cleared at Savannah, 210,884 tons entered and 226,837 tons cleared at Brunswick, 165,378 tons entered and 178,662 tons cleared at Passamaquoddy, 176,073 tons entered and 144,163 tons cleared at Pearl River, 95,007 tons entered and 52,645 tons cleared at Charleston, and 1,750,073 tons entered and 1,705,568 tons cleared at all other seaports. The nationality of the tonnage entered and cleared in the foreign trade at American seaports during the year ending June 30, 1900, is shown in the following table:

NATIONALITY.	TONNAGE.	
	Entered.	Cleared.
American.....	3,974,389	4,006,114
Austrian.....	107,389	139,576
Belgian.....	380,971	365,192
British.....	12,453,113	12,461,012
Danish.....	296,657	296,181
Dutch.....	466,911	441,253
French.....	406,008	414,814
German.....	2,690,489	2,703,791
Italian.....	320,111	332,942
Norwegian and Swedish.....	1,710,814	1,723,247
Portuguese.....	65,053	60,443
Russian.....	79,395	82,080
Spanish.....	358,539	365,428
All other.....	248,016	332,685
Total.....	23,538,597	23,617,666

The number of sailing vessels, including canal boats and barges, registered as belonging in the United States on June 30, 1900, was 16,280, of 2,507,042 tons; the number of steam vessels was 7,053, of 2,657,797 tons; total merchant marine, 23,333 vessels, of 5,164,839 tons. The tonnage owned on the Atlantic and Gulf coasts was 2,727,892 tons; on the Pacific coast, 601,212 tons; on the Northern lakes, 1,565,587 tons; on the Western rivers, 258,456 tons. The steam tonnage employed in the foreign trade in 1900 was 337,356 tons, and the total tonnage of American vessels in the foreign trade was 816,795 tons; steam tonnage in coastwise trade, 2,289,825 tons; total tonnage of coasting vessels, 4,286,516 tons; steam tonnage in the whale fisheries, 3,986 tons; total tonnage in the whale fisheries, 9,899 tons; tonnage in cod and mackerel fisheries, 51,629 tons. The total tonnage of American vessels, 5,164,839 tons, shows an increase of 6.18 per cent. over the previous year, which recorded an advance of 2.41 per cent. over 1898, in which year there was a slight decrease in American tonnage as compared with 1897. There were 504 sailing vessels, of 116,460 tons, built in the United States in 1900; steam vessels built, 422, of 202,528 tons; canal boats, 38, of 4,492 tons; barges, 483, of 40,310; total, 1,447 vessels, of 393,790 tons, compared with 1,273, of 300,038 tons, in 1899 and 952, of 180,458 tons, in 1898. On the New England coast there were 199 vessels built, of 72,179 tons; on the entire seaboard, 1,107 vessels, of 249,006 tons; on the Mississippi river and tributaries, 215 vessels, of 14,173 tons; on the Great Lakes, 125 vessels, of 130,811 tons. Among the sailing vessels built in the United States in 1900 were 10, of 28,903 tons, built of steel, and of the steam vessels 80, of 167,948 tons.

Railroads.—The length of railroads in operation in the United States on Dec. 31, 1899, was 190,833 miles, 3,981 miles having been added during the year. The total length in 1899 was 161,326 miles; in 1879, 86,556 miles; in 1869, 46,844 miles; in 1859, 28,789 miles; in 1849, 7,365 miles; in 1839, 2,302 miles. Of the total mileage in 1899, the New England States had 7,447 miles; Middle Atlantic States, 22,206 miles; Central Northern States, 40,849 miles; Southern Atlantic States, 21,232 miles; Gulf and Mississippi valley, 15,717 miles; Southwestern States, 36,942 miles; Northwestern States, 31,227 miles; Pacific States, 15,209 miles. The total capital stock, returned for 187,781 miles in 1899, was \$5,742,181,181; funded debt, \$5,644,858,027; floating debt, \$308,777,858; total liabilities, \$11,692,817,066; average total cost of construction, \$62,288 per mile. The gross earnings in 1899 were \$1,336,096,379, being 11.4 per cent. on the total liabilities, receipts from passenger traffic being \$297,559,712, from freight \$922,436,314, and miscellaneous receipts \$116,100,353. The interest paid on bonds and other debt was \$245,250,364 during 1899, the average rate being 4.12 per cent., and the dividends paid on stock amounted to \$109,032,252, an average rate of 1.90 per cent. The gross earnings per mile were \$7,101 on the average; net earnings, \$2,400 per mile, the percentage of expenses to earnings having been 66.49, against 68.16 per cent. in 1898, 69.74 per cent. in 1897, and 70.43 per cent. in 1896. The number of passengers carried in 1899 was 537,977,301; passengers carried 1 mile, 14,859,541,965, making average passenger receipts per mile just 2 cents; freight carried, 975,789,941 tons; tons carried 1 mile, 126,991,703,110, making average freight receipts 0.73 cent per ton per mile. The gross earnings of 190,406 miles for the year ending June 30, 1900, were \$1,480,673,054, or \$7,776 per mile of line, \$366,860,760 of the total being passenger and \$1,049,268,875 freight earnings. Operating expenses amounted to \$956,814,142, or \$5,025 per mile. The net earnings were \$523,818,912, or \$73,110,747 more than in 1899. Including \$80,675,700 of income from investments and other sources, the total net income was \$584,534,612, out of which \$109,400,147 were paid in dividends, \$27,555,388 more than in 1899, and the total deductions, including interest on bonds, rents for leased lines, and \$44,396,105 of taxes, were \$395,811,056, leaving a surplus of \$79,323,409, compared with \$53,064,877 in 1899.

Telegraphs.—The Western Union Telegraph Company had 192,705 miles of line and 933,153 miles of wire in operation on June 30, 1900. The number of messages sent during the year was 63,167,783. Receipts were \$24,758,570, and expenses \$18,593,206, leaving \$6,165,364 profits, showing an average toll per message of 30.8 cents and an average cost of 25.1 cents. The Postal Telegraph Company has 26,042 miles of cable and land lines, with 169,236 miles of wire, and during 1900 sent 16,528,444 messages. The total length of telegraph lines in the United States open for public business, excluding railroad, Government, and private lines, exceeds 210,000 miles.

The Bell Telephone Company, on Jan. 1, 1900, had 1,239 exchanges and 1,187 branch offices, and 509,036 miles of wire on poles, 15,087 miles on buildings, 489,250 miles underground, and 3,404 miles submarine, making a total of 1,016,777 miles. The total number of circuits was 422,620; number of employees, 25,741; number of subscribers, 632,946. The aggregate length of telephone wires operated is 1,518,609 miles, the number of conversations about 1,666,000,000 per annum.

Presidential Election.—The nomination of William McKinley, of Ohio, who was elected

President of the United States in 1896 by 271 to 176 electoral votes and by a plurality of 601,854 popular votes over William Jennings Bryan, of Nebraska, was not contested in the Republican party, nor was that of Mr. Bryan in the Democratic party except by the Gold Democrats, who in 1896 either abstained from voting or supported the Republican candidate or joined in the dissident movement of the so-called Jeffersonian Democracy, who under the name of National Democrats nominated John M. Palmer, of Illinois, for President. Before the great parties held their national conventions in 1900 several of the independent parties met to declare their principles and put forward candidates. The fourth annual session of the Supreme Council of the Farmers' Alliance and Industrial Union was held in Washington, D. C., on Feb. 6 and the two following days. The support of the Farmers' Alliance was pledged to the candidates to be chosen by the Democratic party for President and Vice-President, and the following platform was approved:

"Whereas, the Declaration of Independence, as a basis of a republican form of government that might be progressive and perpetual, 'that all men are created equal, that they are endowed with certain inalienable rights, that among these are life, liberty, and the pursuit of happiness, that to secure these rights governments are instituted among men, deriving their just powers from the consent of the governed';

"We hold, therefore, that to restore and preserve these rights under a republican form of government, private monopolies of public necessities for speculative purposes, whether of the means of production, distribution, or exchange, should be prohibited, and whenever such public necessity or utility becomes a monopoly in private hands, the people of the municipality, State, or Union, as the case may be, shall appropriate the same by right of eminent domain, paying a just value therefor, and operate them for and in the interest of the whole people. We demand a national currency, safe, sound, and flexible; issued by the General Government only, a full legal tender for all debts and receivable for all dues, and an equitable and efficient means of distribution of this currency, directly to the people, at the minimum of expense and without the intervention of banking corporations and in sufficient volume to transact the business of the country on a cash basis. We demand the free and unlimited coinage of silver and gold at the legal ratio of 16 to 1. We demand a graduated income tax. That our national legislation shall be so framed in the future as not to build up one industry at the expense of another. We believe that the money of the country should be kept as much as possible in the hands of the people, and hence we demand that all national and State revenues shall be limited to the necessary expenses of the Government economically and honestly administered. We demand that postal savings banks be established by the Government for the safe deposit of the savings of the people, and to facilitate exchange. We are unalterably opposed to the issue by the United States of interest-bearing bonds, and demand the payment of all coin obligations of the United States, as provided by existing laws, in either gold or silver coin, at the option of the Government and not at the option of the creditor. The Government shall purchase or construct and operate a sufficient mileage of railroads to effectually control all rates of transportation on a just and equitable basis. The telegraph and telephone, like the post-office system, being a necessity for the transmission of intelligence, should be owned and operated by the

Government in the interest of the people. We demand that no land shall be held by corporations for speculative purposes or by railroads in excess of their needs as carriers, and all lands now owned by aliens should be reclaimed by the Government and held for actual settlers only. We demand the election of United States Senators by a direct vote of the people; that each State shall be divided into two districts of nearly equal voting population, and that a Senator from each shall be elected by the people of the district. Relying upon the good common sense of the American people, and believing that a majority of them, when uninfluenced by party prejudice, will vote right on all questions submitted to them on their merits; and further to effectually annihilate the pernicious lobby in legislation, we demand direct legislation by means of the initiative referendum. We demand free mail delivery in the rural districts. We demand that the inhabitants of all the territory coming to the United States as a result of the war with Spain be as speedily as possible permitted to organize a free government of their own, based upon the consent of the governed."

The next earliest convention was that of the Social-Democrats, who on March 6, at Indianapolis, Ind., nominated Eugene V. Debs, of Indiana, for President, and Job Harriman, of California, for Vice-President, and on March 7 adopted the following platform:

"The Social-Democratic party of America declares that life, liberty, and happiness depend upon equal political and economic rights. In our economic development an industrial revolution has taken place, the individual tool of former years having become the social tool of the present. The individual tool was owned by the worker, who employed himself and was master of his product. The social tool, the machine, is owned by the capitalist, and the worker is dependent upon him for employment. The capitalist thus becomes the master of the worker, and is able to appropriate to himself a large share of the product of his labor. Capitalism, the private ownership of the means of production, is responsible for the insecurity of subsistence, the poverty, misery, and degradation of the ever-growing majority of our people; but the same economic forces which have produced and now intensify the capitalist system will necessitate the adoption of socialism, the collective ownership of the means of production for the common good and welfare. The present system of social production and private ownership is rapidly converting society into two antagonistic classes—i. e., the capitalist class and the propertyless class. The middle class, once the most powerful of this great nation, is disappearing in the mill of competition. The issue is now between the two classes first named. Our political liberty is now of little value to the masses unless used to acquire economic liberty. Independent political action and the trade-union movement are the chief emancipating factors of the working class, the one representing its political, the other its economic wing, and both must co-operate to abolish the capitalist system. Therefore, the Social-Democratic party of America declares its object to be:

"First, the organization of the working class into a political party to conquer the public powers now controlled by capitalists. Second, the abolition of wage slavery by the establishment of a national system of co-operative industry, based upon the social or common ownership of the means of production and distribution, to be administered by society in the common interest of all its members, and the complete emancipation

of the socially useful classes from the domination of capitalism.

"The working class and all those in sympathy with their historic mission to realize a higher civilization should sever connection with all capitalist and reform parties and unite with the Social-Democratic party of America. The control of political power by the Social-Democratic party will be tantamount to the abolition of all class rule. The solidarity of labor connecting the millions of class-conscious fellow-workers throughout the civilized world will lead to international socialism, the brotherhood of man.

"As steps in that direction, we make the following demands:

"First, revision of our Federal Constitution, in order to remove the obstacles to complete control of government by the people irrespective of sex. Second, the public ownership of all industries controlled by monopolies, trusts, and combines. Third, the public ownership of all railroads, telegraphs, and telephones; all means of transportation and communication; all waterworks, gas and electric plants, and other public utilities. Fourth, the public ownership of all gold, silver, copper, lead, iron, coal, and other mines, and all oil and gas wells. Fifth, the reduction of the hours of labor in proportion to the increasing facilities of production. Sixth, the inauguration of a system of public works and improvements for the employment of the unemployed, the public credit to be utilized for that purpose. Seventh, useful inventions to be free, the inventor to be remunerated by the public. Eighth, labor legislation to be national instead of local, and international when possible. Ninth, national insurance of working people against accidents, lack of employment, and want in old age. Tenth, equal civil and political rights for men and women, and the abolition of all laws discriminating against women. Eleventh, the adoption of the initiative and referendum, proportional representation, and the right of recall of representatives by the voters. Twelfth, abolition of war and introduction of international arbitration."

Early in January the national committee of the Union Reform party, which favors direct legislation, appointed a canvassing board, which sent out ballots to members of the party for votes for candidates for President and Vice-President. The balloting continued through February and March. In April the canvassing board announced that Seth H. Ellis, of Ohio, and Samuel T. Nicholson, of Pennsylvania, had been nominated for President and Vice-President respectively on the platform favored at Cincinnati on March 1, 1899: "Direct legislation under the system known as the initiative and referendum. Under the initiative the people can compel the submission to themselves of any desired law, when, if it receives a majority of the votes cast, it is thereby enacted. Under the referendum the people can compel the submission to themselves of any law which has been adopted by any legislative body, when, if such law fails to receive a majority of the votes cast, it will be thereby rejected." The convention adopted an appeal in part as follows: "We accept the strong and unanswerable arguments of our friends. We see no need or benefit from party except a party to secure direct legislation. We have attached ourselves to the Union Reform party for direct legislation only. This party, organized by progressive and active men from this and other States at a time when dominant parties had legislated to make the initiation of reform movements impossible, acted while we were awaiting an opportune hour. We ask our honest, home-loving

fellow-citizens to organize in their respective precincts, and to honestly and fairly extend their organization to county and district, and to assist in controlling and extending the party and movement until the desired object is attained. The majority is with us in this desire for direct government, and with this sole purpose they must act at last. The logic of events, the tyranny of the bosses, and the necessities of the hour assure us. Friends, this securing of a rightful voice is the affair of the individual, of each and every one. Government direct by the people will not come as a voluntary concession from the holders of political power. These controllers of parties will not permit of referendum of acts and expenditures; they will not give to the people initiatory and mandatory rights, because to do so would be to destroy their own useless but lucrative occupations. These party bosses who monopolize political opportunity are the allies and supporters of all monopolies. We all believe that conditions can be made better or worse by legislation. The corporations know this and act accordingly. Truly they contribute to the election of candidates, but their great contributions are direct to the machine."

The United Christian party, a new organization, met at Rock Island, Ill., and on May 2 nominated by acclamation Silas P. Swallow, of Pennsylvania, for President, and John G. Woolley, of Illinois, for Vice-President. These candidates withdrew, and the party, which is devoted to the inculcation of religious and moral ideas as controlling forces in politics and government, put in nomination for the respective offices Jonah F. R. Leonard, of Iowa, and David H. Martin, of Pennsylvania. The convention adopted the following platform:

"We, the United Christian party, in national convention assembled, acknowledging Almighty God as the source of all power and authority, the Lord Jesus Christ as the sovereign ruler of nations, and the Bible as the standard by which to decide moral issues in our political life, do make the following declaration: We believe the time to have arrived when the eternal principles of justice, mercy, and love as exemplified in the life and teachings of Jesus Christ should be embodied in the Constitution of our nation and applied in concrete form to every function of our Government. We deprecate certain immoral laws which have grown out of the failure of our nation to recognize these principles, notably such as require the desecration of the Christian Sabbath, authorize unscriptural marriage and divorce, license the manufacture and sale of intoxicating liquors as a beverage, and permit the sale of cigarettes or tobacco in any form to minors. As an expression of consent or allegiance on the part of the governed, in harmony with the above statements, we declare for the adoption and use of the system of direct legislation known as the 'initiative and referendum,' together with 'proportionate representation' and the 'imperative mandate.' We hold that all men and women are created free and with equal rights, and declare for the establishment of such political, industrial, and social conditions as shall guarantee to every person civic equality, the full fruits of his or her honest toil, and opportunity for the righteous enjoyment of the same; and we especially condemn mob violence and outrages against any individual or class of individuals in our country. We declare against war and for the arbitration of all national and international disputes. We hold that the legalized liquor traffic is the crowning infamy of civilization, and we declare for the immediate abolition

of the manufacture and sale of intoxicating liquors as a beverage. We are gratified to note the widespread agitation of the cigarette question, and declare ourselves in favor of the enactment of laws prohibiting the sale of cigarettes or tobacco in any form to minors. We declare for the daily reading of the Bible in the public schools and institutions of learning under control of the State. We declare for the Government ownership of public utilities. We declare for the election of the President and Vice-President and United States Senators by the direct vote of the people. We declare for such amendment of the United States Constitution as shall be necessary to give the principles herein set forth an undeniable legal basis in the fundamental law of our land. We invite into the United Christian party every honest man and woman who believes in Christ and his golden rule and standard of righteousness."

The fusion wing of the People's party held a convention at Sioux Falls, S. D., on May 10, at which William J. Bryan was nominated for President by acclamation. A motion to defer the nomination for Vice-President and appoint a committee to confer with the National Democratic Convention was defeated by 492 to 462 votes. Howard S. Taylor, of Illinois, J. H. Davis, of Texas, E. Gerry Brown, of Massachusetts, J. W. Breidenthal, of Kansas, T. T. Rhinder, of Pennsylvania, and John J. Lentz, of Ohio, withdrew their names when they were brought forward for the nomination in favor of Charles A. Towne, of Minnesota, who was nominated by acclamation, and who withdrew, on Aug. 8, after A. E. Stevenson was nominated by the Democratic convention, and on Aug. 28 the Executive Committee named Mr. Stevenson as the candidate of the party. The following platform was adopted:

"Resolved, that we denounce the act of March 14, 1900, as the culmination of a long series of conspiracies to deprive the people of their constitutional rights over the money of the nation and relegate to a gigantic money trust the control of the purse and hence of the people. We denounce this act, first, for making all money obligations, domestic and foreign, payable in gold coin or its equivalent, thus enormously increasing the burdens of the debtors and enriching the creditors. Second, for refunding coin bonds not to mature for years into long-time gold bonds so as to make their payment improbable and our debt perpetual. Third, for taking from the Treasury over \$50,000,000 in a time of war and presenting it as a premium to bondholders to accomplish the refunding of bonds not due. Fourth, for doubling the capital of bankers by returning them the face value of their bonds in current money notes so that they may draw one interest from the Government and another from the people. Fifth, for allowing banks to expand and contract their circulation at pleasure, thus controlling prices of all products. Sixth, for authorizing the Secretary of the Treasury to issue new gold bonds to an unlimited amount whenever he deems it necessary to replenish the gold hoard, thus enabling usurers to secure more bonds and more bank currency by drawing gold from the Treasury, thereby creating an endless chain for perpetually adding to a perpetual debt. Seventh, for striking down the greenback in order to force the people to borrow \$346,000,000 more from the banks at an annual cost of over \$20,000,000. While barring out the money of the Constitution this law opens the printing mints of the Treasury to the free coinage of bank paper money, to enrich the few and impoverish the many. We pledge anew the People's party never to cease the agitation until this great

financial conspiracy is blotted from the statute books, the Lincoln greenback restored, the bonds all paid, and all corporation money forever retired. We affirm the demand for the reopening of the mints of the United States for the free and unlimited coinage of silver and gold at the present legal ratio of 16 to 1, the immediate increase in the volume of silver coins and certificates thus created to be substituted, dollar for dollar, for the bank notes issued by private corporations under special privilege granted by law of March 14, 1900, and prior national banking laws, the remaining portion of the bank notes to be replaced with full legal-tender Government paper money, and its volume so controlled as to maintain at all times a stable money market and a stable price level. We demand a graduated income and inheritance tax, to the end that aggregated wealth shall bear its just proportion of taxation. We demand that postal savings banks be established by the Government for the safe deposit of the savings of the people and to facilitate exchange. With Thomas Jefferson we declare the land, including all natural sources of wealth, the inalienable heritage of the people. Government should so act as to secure homes for the people and prevent land monopoly. The original homestead policy should be enforced, and future settlers upon the public domain should be entitled to a free homestead, while all who have paid an acreage price to the Government under existing laws should have their homestead rights restored. Transportation being a means of exchange and a public necessity, the Government should own and operate the railroads in the interests of the people and on a nonpartisan basis, to the end that all may be accorded the same treatment in transportation, and that the extortion, tyranny, and political power now exercised by the great railroad corporations, which result in the impairment, if not the destruction, of the political rights and personal liberties of the citizen, may be destroyed. Such ownership is to be accomplished in a manner consistent with sound public policy. Trusts, the overshadowing evil of the age, are the result and culmination of the private ownership and control of the three great instruments of commerce—money, transportation, and the means of transmission of information—which instruments of commerce are public functions, and which our forefathers declared in the Constitution should be controlled by the people through their Congress for the public welfare. The one remedy for the trusts is that the ownership and control be assumed and exercised by the people. We further demand that all tariffs on goods controlled by a trust shall be abolished. To cope with the trust evil, the people must act directly without the intervention of representatives who may be controlled or influenced. We therefore demand direct legislation, giving the people the lawmaking and veto power under the initiative and referendum. A majority of the people can never be corruptly influenced. Applauding the valor of our army and navy in the Spanish War, we denounce the conduct of the administration in changing a war for humanity into a war of conquest. The action of the administration in the Philippines is in conflict with all the precedents of our national life; at war with the Declaration of Independence, the Constitution, and the plain precepts of humanity. Murder and arson have been our response to the appeals of the people who asked only to establish a free government in their own land. We demand a stoppage of this war of extermination by the assurance to the Philippines of independence and the protection under a stable government of their own creation. The Declaration of

Independence, the Constitution, and the American flag are one and inseparable. The island of Porto Rico is a part of the territory of the United States, and by levying special and extraordinary customs duties on the commerce of that island the administration has violated the Constitution, abandoned the fundamental principles of American liberty, and has striven to give the lie to the contention of our forefathers that there should be no taxation without representation. Out of the imperialism which would force an undesired domination on the people of the Philippines springs the un-American cry for a large standing army. Nothing in the character or purposes of our people justifies us in ignoring the plain lesson of history and putting our liberties in jeopardy by assuming the burden of militarism, which is crushing the people of the Old World. We denounce the administration for its sinister efforts to substitute a standing army for the citizen soldiery, which is the best safeguard of the republic. We extend to the brave Boers of South Africa our sympathy and moral support in their patriotic struggle for the right of self-government, and we are unalterably opposed to any alliance, open or covert, between the United States and any other nation that will tend to the destruction of liberty. And a further manifestation of imperialism is to be found in the mining districts of Idaho. In the Cœur d'Alene soldiers have been used to overawe miners striving for a greater measure of industrial independence. And we denounce the State Government of Idaho and the Federal Government for employing the military arm of the Government to abridge the civil rights of the people, and to enforce an infamous permit system which denies to laborers their inherent liberty and compels them to forswear their manhood and their right before being permitted to seek employment. The importation of Japanese and other laborers under contract to serve monopolistic corporations is a notorious and flagrant violation of the immigration laws. We demand that the Federal Government shall take cognizance of this menacing evil and repress it under existing laws. We further pledge ourselves to strive for the enactment of more stringent laws for the exclusion of Mongolian and Malayan immigration. We indorse municipal ownership of public utilities, and declare that the advantages which have accrued to the public under that system would be multiplied a hundredfold by its extension to natural interstate monopolies."

The antifusion or Middle-of-the-Road People's party held a national convention at Cincinnati, Ohio, at the same time as the fusionist convention. Wharton Barker, of Pennsylvania, received the nomination for President on the second ballot by 370 votes to 336 for Milford W. Howard, of Alabama, and 9 scattering. Ignatius Donnelly, of Minnesota, was nominated for the vice-presidency by acclamation. The platform was as follows:

"The People's party of the United States, assembled in national convention this 10th day of May, 1900, affirming our unshaken belief in the cardinal tenets of the People's party as set forth in the Omaha platform, and pledging ourselves anew to continued advocacy of those grand principles of human liberty, until right shall triumph over might and love over greed, do adopt and proclaim this declaration of faith. We demand the initiative and referendum, and the imperative mandate for such changes of existing fundamental and statute law as will enable the people in their sovereign capacity to propose and compel the enactment of such laws as they desire, to reject such as they deem injurious to their interests, and to recall unfaithful public servants. We demand the

public ownership and operation of those means of communication, transportation, and production which the people may elect, such as railroads, telegraph and telephone lines, coal mines, etc. The land, including all natural sources of wealth, is a heritage of the people, and should not be monopolized for speculative purposes, and alien ownership of land should be prohibited. All lands now held by railroads and other corporations in excess of their actual needs, and all lands now owned by aliens, should be reclaimed by the Government and held for actual settlers only. A scientific and absolute paper money, based upon the entire wealth and population of the nation, not redeemable in any specific commodity, but made a full legal tender for all debts, and receivable for all taxes and public dues, and issued by the Government only without the intervention of banks, and in sufficient quantity to meet the demands of commerce, is the best currency that can be devised, but until such a financial system is secured, which we shall press for adoption, we favor the free and unlimited coinage of both silver and gold at the legal ratio of 16 to 1. We demand the levy and collection of a graduated tax on incomes and inheritances, and a constitutional amendment to secure the same, if necessary. We demand the election of President, Vice-President, Federal judges, and United States Senators by direct vote of the people. We are opposed to trusts, and declare the contention between the old parties on the monopoly question is a sham battle, and that no solution of this mighty problem is possible without the adoption of the principles of public ownership of public utilities."

The Socialist-Labor party held a national convention in New York city, and on June 6 nominated for President Joseph F. Malloney, of Massachusetts, and for Vice-President Valentine Rimmel, of Pennsylvania. The convention readopted the declaration of principles of 1896, as follows:

"The Socialist-Labor party of the United States, in convention assembled, reasserts the inalienable right of all men to life, liberty, and the pursuit of happiness. With the founders of the American republic we hold that the purpose of government is to secure every citizen in the enjoyment of this right; but in the light of our social conditions we hold, furthermore, that no such right can be exercised under a system of economic inequality, essentially destructive of life, of liberty, and of happiness. With the founders of this republic we hold that the true theory of politics is that the machinery of government must be owned and controlled by the whole people; but in the light of our industrial development we hold, furthermore, that the true theory of economics is that the machinery of production must likewise belong to the people in common. To the obvious fact that our despotic system of economics is the direct opposite of our democratic system of politics can plainly be traced the existence of a privileged class, the corruption of government by that class, the alienation of public property, public franchises, and public functions to that class, and the abject dependence of the mightiest of nations upon that class. Again, through the perversion of democracy to the ends of plutocracy, labor is robbed of the wealth which it alone produces, is denied the means of self-employment, and, by compulsory idleness in wage slavery, is even deprived of the necessities of life. Human power and natural forces are thus wasted, that the plutocracy may rule. Ignorance and misery, with all their concomitant evils, are perpetuated, that the people may be kept in bondage. Science and invention are diverted from their humane purpose to the enslavement of women and children.

Against such a system the Socialist-Labor party once more enters its protest. Once more it reiterates its fundamental declaration that private property in the natural sources of production and in the instruments of labor is the obvious cause of all economic servitude and political dependence. The time is fast coming when, in the natural course of social evolution, this system, through the destructive action of its failures and crises on the one hand, and the constructive tendencies of its trusts and other capitalistic combinations on the other hand, shall have worked out its own downfall. We therefore call upon the wage workers of the United States, and upon all other honest citizens, to organize under the banner of the Socialist-Labor party into a class-conscious body, aware of its rights and determined to conquer them by taking possession of the public powers; so that, held together by an indomitable spirit of solidarity under the most trying conditions of the present class struggle, we may put a summary end to that barbarous struggle by the abolition of classes, the restoration of the land and of all the means of production, transportation, and distribution to the people as a collective body, and the substitution of the co-operative commonwealth for the present state of planless production, industrial war, and social disorder; a commonwealth in which every worker shall have the free exercise and full benefit of his faculties, multiplied by all the modern factors of civilization."

The Republican National Convention met in Philadelphia, Pa., on June 19. Theodore Roosevelt, Governor of New York, was the candidate for Vice-President favored not only by the delegation from his own State, but by all the Western delegates. He published a request that the convention nominate some one else, and the New York delegation proposed the name of Lieut.-Gov. Timothy L. Woodruff. But the sentiment was so strong in favor of Mr. Roosevelt that in the first ballot on June 21 he received every vote except his own, while Mr. McKinley was renominated unanimously. The platform was adopted in the following shape:

"The Republicans of the United States, through their chosen representatives, met in national convention, looking back upon an unsurpassed record of achievement and looking forward into a great field of duty and opportunity, and appealing to the judgment of their countrymen, make these declarations: The expectation in which the American people, turning from the Democratic party, intrusted power four years ago to a Republican Chief Magistrate and a Republican Congress has been met and satisfied. When the people then assembled at the polls, after a term of Democratic legislation and administration, business was dead, industry paralyzed and the national credit disastrously impaired. The country's capital was hidden away, and its labor distressed and unemployed. The Democrats had no other plan with which to improve the ruinous conditions which they had themselves produced than to coin silver at the ratio of 16 to 1. The Republican party, denouncing this plan as sure to produce conditions even worse than those from which relief was sought, promised to restore prosperity by means of two legislative measures—a protective tariff and a law making gold the standard of value. The people by great majorities issued to the Republican party a commission to enact these laws. This commission has been executed, and the Republican promise is redeemed. Prosperity more general and more abundant than we have ever known has followed these enactments. There is

no longer controversy as to the value of any Government obligation. Every American dollar is a gold dollar, or its assured equivalent, and American credit stands higher than that of any nation. Capital is fully employed and labor everywhere is profitably occupied. No single fact can more strikingly tell the story of what Republican government means to the country than this—that while during the whole period of one hundred and seven years, from 1790 to 1897, there was an excess of exports over imports of only \$383,028,407, there has been in the short three years of the present Republican administration an excess of exports over imports in the enormous sum of \$1,483,537,094. And while the American people, sustained by this Republican legislation, have been achieving these splendid triumphs in their business and commerce, they have conducted, and in victory concluded, a war for liberty and human rights. No thought of national aggrandizement tarnished the high purpose with which American standards were unfurled. It was a war unsought and patiently resisted, but when it came the American Government was ready. Its fleets were cleared for action. Its armies were in the field, and the quick and signal triumph of its forces on land and sea bore equal tribute to the courage of American soldiers and sailors and to the skill and foresight of republican statesmanship. To ten millions of the human race there was given 'a new birth of freedom,' and to the American people a new and noble responsibility.

"We indorse the administration of William McKinley. Its acts have been established in wisdom and in patriotism, and at home and abroad it has distinctly elevated and extended the influence of the American nation. Walking untried paths and facing unforeseen responsibilities, President McKinley has been in every situation the true American patriot and the upright statesman, clear in vision, strong in judgment, firm in action, always inspiring and deserving the confidence of his countrymen. In asking the American people to indorse this Republican record and to renew their commission to the Republican party, we remind them of the fact that the menace to their prosperity has always resided in Democratic principles, and no less in the general incapacity of the Democratic party to conduct public affairs. The prime essential of business prosperity is public confidence in the good sense of the Government and in its ability to deal intelligently with each new problem of administration and legislation. That confidence the Democratic party has never earned. It is hopelessly inadequate, and the country's prosperity when Democratic success at the polls is announced halts and ceases in mere anticipation of Democratic blunders and failures.

"We renew our allegiance to the principle of the gold standard, and declare our confidence in the wisdom of the legislation of the Fifty-sixth Congress, by which the parity of all our money and the stability of our currency upon a gold basis have been secured. We recognize that interest rates are a potent factor in production and business activity, and for the purpose of further equalizing and of further lowering the rates of interest we favor such monetary legislation as will enable the varying needs of the season and of all sections to be promptly met, in order that trade may be evenly sustained, labor steadily employed, and commerce enlarged. The volume of money in circulation was never so great per capita as it is to-day. We declare our steadfast opposition to the free and unlimited coinage of silver. No measure to that end could be considered which was without the support of the leading commer-

cial countries of the world. However firmly Republican legislation may seem to have secured the country against the peril of base and discredited currency, the election of a Democratic President could not fail to impair the country's credit and to bring once more into question the intention of the American people to maintain upon the gold standard the parity of their money circulation. The Democratic party must be convinced that the American people will never tolerate the Chicago platform.

"We recognize the necessity and propriety of the honest co-operation of capital to meet new business conditions, and especially to extend our rapidly increasing foreign trade, but we condemn all conspiracies and combinations intended to restrict business, to create monopolies, to limit production, or to control prices, and favor such legislation as will effectively restrain and prevent all such abuses, protect and promote competition, and secure the rights of producers, laborers, and all who are engaged in industry and commerce.

"We renew our faith in the policy of protection to American labor. In that policy our industries have been established, diversified, and maintained. By protecting the home market competition has been stimulated and production cheapened. Opportunity for the inventive genius of our people has been secured and wages in every department of labor maintained at high rates, higher now than ever before, and always distinguishing our working people in their better conditions of life from those of any competing country. Enjoying the blessings of the American common school, secure in the right of self-government and protected in the occupancy of their own markets, their constantly increasing knowledge and skill have enabled them finally to enter the markets of the world.

"We favor the associated policy of reciprocity so directed as to open our markets on favorable terms for what we do not ourselves produce, in return for free foreign markets.

"In the further interest of American workmen we favor a more effective restriction of the immigration of cheap labor from foreign lands, the extension of opportunities of education for working children, the raising of the age limit for child labor, the protection of free labor as against contract convict labor, and an effective system of labor insurance. Our present dependence upon foreign shipping for nine tenths of our foreign carrying is a great loss to the industry of this country. It is also a serious danger to our trade, for its sudden withdrawal in the event of European war would seriously cripple our expanding foreign commerce. The national defense and naval efficiency of this country, moreover, supply a compelling reason for legislation which will enable us to recover our former place among the trade-carrying fleets of the world. The nation owes a debt of profound gratitude to the soldiers and sailors who have fought its battles, and it is the Government's duty to provide for the survivors and for the widows and orphans of those who have fallen in the country's wars. The pension laws, founded in this just sentiment, should be liberal and should be liberally administered, and preference should be given wherever practicable with respect to employment in the public service to soldiers and sailors and to their widows and orphans. We commend the policy of the Republican party in maintaining the efficiency of the civil service. The administration has acted wisely in its effort to secure for public service in Cuba, Porto Rico, Hawaii, and the Philippine Islands only those whose fitness has been deter-

mined by training and experience. We believe that employment in the public service in these territories should be confined as far as practicable to their inhabitants.

"It was the plain purpose of the fifteenth amendment to the Constitution to prevent discrimination on account of race or color in regulating the elective franchise. Devices of State governments, whether by statutory or constitutional enactment, to avoid the purpose of this amendment are revolutionary and should be condemned. Public movements looking to a permanent improvement of the roads and highways of the country meet with our cordial approval, and we recommend this subject to the earnest consideration of the people and of the Legislatures of the several States. We favor the extension of the rural free-delivery service wherever its extension may be justified. In further pursuance of the constant policy of the Republican party to provide free homes on the public domain, we recommend adequate national legislation to reclaim the arid lands of the United States, reserving control of the distribution of water for irrigation to the respective States and Territories. We favor home rule for and the early admission to statehood of the Territories of New Mexico, Arizona, and Oklahoma. The Dingley act, amended to provide sufficient revenue for the conduct of the war, has so well performed its work that it has been possible to reduce the war debt in the sum of \$40,000,000. So ample are the Government's revenues and so great is the public confidence in the integrity of its obligations that its newly funded 2-per-cent. bonds sell at a premium. The country is now justified in expecting, and it will be the policy of the Republican party to bring about, a reduction of the war taxes.

"We favor the construction, ownership, control, and protection of an isthmian canal by the Government of the United States. New markets are necessary for the increasing surplus of our farm products. Every effort should be made to open and obtain new markets, especially in the Orient, and the administration is warmly to be commended for its successful effort to commit all trading and colonizing nations to the policy of the open door in China. In the interest of our expanding commerce we recommend that Congress create a Department of Commerce and Industries in the charge of a secretary with a seat in the Cabinet. The United States consular system should be reorganized under the supervision of this new department, upon such a basis of appointment and tenure as will render it still more serviceable to the nation's increasing trade. The American Government must protect the person and property of every citizen wherever they are wrongfully violated or placed in peril.

"We congratulate the women of America upon their splendid record of public service in the volunteer aid associations, and as nurses in camp and hospital during the recent campaigns of our armies in the Eastern and Western Indies, and we appreciate their faithful co-operation in all works of education and industry.

"President McKinley has conducted the foreign affairs of the United States with distinguished credit to the American people. In releasing us from the vexatious conditions of a European alliance for the Government of Samoa his course is especially to be commended. By securing to our undivided control the most important island of the Samoan group and the best harbor in the southern Pacific, every American interest has been safeguarded. We approve the annexation of the Hawaiian Islands to the United States. We com-

mend the part taken by our Government in the Peace Conference at The Hague. We assert our steadfast adherence to the policy announced in the Monroe Doctrine. The provisions of The Hague convention were wisely regarded when President McKinley tendered his friendly offices in the interest of peace between Great Britain and the South African republics. While the American Government must continue the policy prescribed by Washington, affirmed by every succeeding President, and imposed upon us by The Hague Treaty, of nonintervention in European controversies, the American people earnestly hope that a way may soon be found, honorable alike to both contending parties, to terminate the strife between them. In accepting by the Treaty of Paris the just responsibility of our victories in the Spanish War the President and the Senate won the undoubted approval of the American people. No other course was possible than to destroy Spain's sovereignty throughout the West Indies and in the Philippine Islands. That course created our responsibility before the world, and with the unorganized population whom our intervention had freed from Spain, to provide for the maintenance of law and order, and for the establishment of good government and for the performance of international obligations. Our authority could not be less than our responsibility, and wherever sovereign rights were extended it became the high duty of the Government to maintain its authority, to put down armed insurrection, and to confer the blessings of liberty and civilization upon all the rescued peoples. The largest measures of self-government consistent with their welfare and our duties shall be secured to them by law. To Cuba independence and self-government were assured in the same voice by which war was declared, and to the letter this pledge will be performed. The Republican party upon its history, and upon this declaration of its principles and policies, confidently invokes the considerate and approving judgment of the American people."

The Prohibition party, in national convention at Chicago, Ill., on June 28, nominated John G. Woolley, of Illinois, for President on the first ballot, which gave 380 votes for him and 329 for Silas C. Swallow, of Pennsylvania, Hale Johnson, of Illinois, withdrawing his name. Henry B. Metcalf, of Rhode Island, received the nomination for Vice-President over Thomas R. Carskadden, of West Virginia, and E. L. Eaton, of Iowa. The platform, adopted on June 27, contained the following declarations:

"We propose as a first step in the financial problems of the nation to save more than a billion dollars every year, now annually expended to support the liquor traffic and to demoralize our people. When that is accomplished, conditions will have so improved that with a clearer atmosphere the country can address itself to the questions as to the kind and quantity of currency needed.

"We reaffirm as true indisputably the declaration of William Windom when Secretary of the Treasury in the Cabinet of President Arthur, that, 'considered socially, financially, politically, or morally, the licensed liquor traffic is or ought to be the overwhelming issue in American politics,' and that 'the destruction of this iniquity stands next on the calendar of the world's progress.' We hold that the existence of our party presents this issue squarely to the American people, and lays upon them the responsibility of choice between liquor parties, dominated by distillers and brewers, with their policy of saloon perpetuation, breeding waste, wickedness, woe, pauperism, taxa-

tion, corruption, and crime, and our one party of patriotic and moral principle, with a policy which defends it from domination by corrupt bosses and which insures it forever against the blighting control of saloon politics. We face with sorrow, shame, and fear the awful fact that this liquor traffic has a grip on our Government, municipal, State, and national, through the revenue system and saloon sovereignty, which no other party dares to dispute; a grip which dominates the party now in power, from caucus to Congress, from policeman to President, from the rum shop to the White House; a grip which compels the Chief Executive to consent that law shall be nullified in behalf of the brewer, that the canteen shall curse our army and spread intemperance across the seas, and that our flag shall wave as the symbol of partnership at home and abroad between this Government and the men who defy and defile it for their unholy gain.

"We charge upon President McKinley, who was elected to his high office by appeals to Christian sentiment and patriotism almost unprecedented and by a combination of moral influences never before seen in this country, that, by his conspicuous example as a wine drinker at public banquets and as a wine-serving host in the White House, he has done more to encourage the liquor business, to demoralize the temperance habits of young men, and to bring Christian practices and requirements into disrepute than any other President this republic has ever had. We further charge upon President McKinley responsibility for the army canteen, with all its dire brood of disease, immorality, sin, and death, in this country, in Cuba, in Porto Rico, and the Philippines; and we insist that by his attitude concerning the canteen and his apparent contempt for the vast number of petitions and petitioners protesting against it, he has outraged and insulted the moral sentiment of this country in such a manner and to such a degree as calls for its righteous uprising and his indignant and effective rebuke. We challenge denial of the fact that our Chief Executive, as commander in chief of the military forces of the United States, at any time prior to or since March 2, 1899, could have closed every army saloon, called a canteen, by executive order, as President Hayes in effect did before him, and should have closed them, for the same reason that actuated President Hayes.

"We deplore the fact that an administration of this republic, claiming the right and power to carry our flag across the seas and to conquer and annex new territory, should admit its lack of power to prohibit the American saloon on subjugated soil, or should openly confess itself subject to liquor sovereignty under that flag. We are humiliated, exasperated, and grieved by the evidence, painfully abundant, that this administration's policy of expansion is bearing so rapidly its first fruits of drunkenness, insanity, and crime under the hothouse sun of the tropics; and that when the president of the first Philippine Commission said, 'It was unfortunate that we introduced and established the saloon there, to corrupt the natives and to exhibit the vices of our race,' we charge the inhumanity and unchristianity of this act on the administration of William McKinley and upon the party which elected and would perpetuate the same. We declare that the only policy which the Government of the United States can of right uphold as to the liquor traffic under the national Constitution upon any territory under the military or civil control of that Government is the policy of prohibition; that 'to establish justice, insure domestic tranquillity, provide for the

common defense, promote the general welfare, and insure the blessings of liberty to ourselves and our posterity,' as the Constitution provides, the liquor traffic must neither be sanctioned nor tolerated, and that the revenue policy, which makes our Government a partner with distillers and brewers and barkeepers, is a disgrace to our civilization, an outrage upon humanity, and a crime against God. We condemn the present administration at Washington because it has repealed the prohibitory law in Alaska, and has given over the partly civilized tribes there to be the prey of the American grogshop, and because it has entered upon a license policy in our new possessions by incorporating the same in the revenue act of Congress in the code of laws for the government of the Hawaiian Islands. We call general attention to the fearful fact that exportation of liquors from the United States to the Philippine Islands increased from \$337 in 1898 to \$467,198 in the first ten months of the fiscal year ended June 30, 1900; and that while our exportations of liquor to Cuba never reached \$30,000 a year previous to American occupation of that island, our exports of such liquors to Cuba during the fiscal year of 1899 reached the sum of \$629,655."

The Democratic party assembled on July 4 in national convention at Kansas City, Mo., and on July 5 nominated William Jennings Bryan, of Nebraska, for President, by acclamation. Adlai E. Stevenson, of Illinois, was nominated for Vice-President by 559½ votes to 200 for David B. Hill, of New York, 89½ for C. A. Towne, of Minnesota, and 87, all but 2 of them, divided between A. W. Patrick, of Ohio, Julian S. Carr, of North Carolina, and John Walter Smith, of Maryland, who received the ballots of their State delegations. The platform adopted on the same day was as follows:

"We, the representatives of the Democratic party of the United States, assembled in convention on the anniversary of the adoption of the Declaration of Independence, do reaffirm our faith in that immortal proclamation of the inalienable rights of man, and our allegiance to the Constitution framed in harmony therewith by the fathers of the republic. We hold with the United States Supreme Court that the Declaration of Independence is the spirit of our Government, of which the Constitution is the form and letter:

"We declare again that all governments instituted among men derive their just powers from the consent of the governed; that any government not based upon the consent of the governed is a tyranny; and that to impose upon any people a government of force is to substitute the methods of imperialism for those of a republic. We hold that the Constitution follows the flag, and denounce the doctrine that an Executive or Congress, deriving their existence and their powers from the Constitution, can exercise lawful authority beyond it, for in violation of it we assert that no nation can long endure half republic and half empire, and we warn the American people that imperialism abroad will lead quickly and inevitably to despotism at home. Believing in these fundamental principles, we denounce the Porto Rico law, enacted by a Republican Congress against the protest and opposition of the Democratic minority, as a bold and open violation of the nation's organic law and a flagrant breach of the national good faith. It imposes upon the people of Porto Rico a government without their consent and taxation without representation. It dishonors the American people by repudiating a solemn pledge made in their behalf by the commanding general of our army, which the

Porto Ricans welcomed to a peaceful and unresisted occupation of their land. It doomed to poverty and distress a people whose helplessness appeals with peculiar force to our justice and magnanimity. In this, the first act of its imperialistic programme, the Republican party seeks to commit the United States to a colonial policy, inconsistent with republican institutions and condemned by the Supreme Court in numerous decisions. We demand the prompt and honest fulfillment of our pledge to the Cuban people and the world that the United States has no disposition nor intention to exercise sovereignty, jurisdiction, or control over the island of Cuba except for its pacification. The war ended nearly two years ago, profound peace reigns over all the island, and still the administration keeps the government of the island from its people, while Republican carpetbag officials plunder its revenue and exploit the colonial theory to the disgrace of the American people. We condemn and denounce the Philippine policy of the present administration. It has involved the republic in unnecessary war, sacrificed the lives of many of our noblest sons, and placed the United States, previously known and applauded throughout the world as the champion of freedom, in the false and un-American position of crushing with military force the efforts of our former allies to achieve liberty and self-government. The Filipinos can not be citizens without endangering our civilization; they can not be subjects without imperiling our form of government, and as we are not willing to surrender our civilization or to convert the republic into an empire, we favor an immediate declaration of the nation's purpose to give to the Filipinos first a stable form of government; second, independence; and third, protection from outside interference, such as has been given for nearly a century to the republics of Central and South America. The greedy commercialism which dictated the Philippine policy of the Republican administration attempts to justify it with the plea that it will pay, but even this sordid and unworthy plea fails when brought to the test of facts. The war of criminal aggression against the Filipinos, entailing an annual expense of many millions, has already cost more than any possible profit that could accrue from the entire Philippine trade for years to come. Furthermore, when trade is extended at the expense of liberty the price is always too high. We are not opposed to territorial expansion when it takes in desirable territory which can be erected into States in the Union, and whose people are willing and fit to become American citizens. We favor expansion by every peaceful and legitimate means. But we are unalterably opposed to the seizing or purchasing of distant islands, to be governed outside the Constitution, and whose people can never become citizens. We are in favor of extending the republic's influence among the nations, but believe that influence should be extended not by force and violence, but through the persuasive power of a high and honorable example. The importance of other questions now pending before the American people is in no wise diminished, and the Democratic party takes no backward step from its position on them, but the burning issue of imperialism growing out of the Spanish War involves the very existence of the republic and the destruction of our free institutions. We regard it as the paramount issue of the campaign. The declaration in the Republican platform adopted at the Philadelphia convention, held in June, 1900, that the Republican party 'steadfastly adheres to the policy announced in the Monroe doctrine,' is manifestly

insincere and deceptive. This profession is contradicted by the avowed policy of that party in opposition to the spirit of the Monroe doctrine to acquire and hold sovereignty over large areas of territory and large numbers of people in the Eastern Hemisphere. We insist on the strict maintenance of the Monroe doctrine, and in all its integrity, both in letter and in spirit, as necessary to prevent the extension of European authority on this continent and as essential to our supremacy in American affairs. At the same time we declare that no American people shall ever be held by force in subjection to European authority.

"We oppose militarism. It means conquest abroad and intimidation and oppression at home. It means the strong arm which has ever been fatal to free institutions. It is what millions of our citizens have fled from in Europe. It will impose upon our peace-loving people a large standing army, an unnecessary burden of taxation, and would be a constant menace to their liberties. A small standing army and a well-disciplined State militia are amply sufficient in time of peace. This republic has no place for a vast military establishment, a sure forerunner of compulsory military service and conscription. When the nation is in danger the volunteer soldier is his country's best defender. The National Guard of the United States should ever be cherished in the patriotic hearts of a free people. Such organizations are ever an element of strength and safety. For the first time in our history and coeval with the Philippine conquest has there been a wholesale departure from our time-honored and approved system of volunteer organization. We denounce it as un-American, undemocratic and unrepudican, and as a subversion of the ancient and fixed principles of a free people.

"Private monopolies are indefensible and intolerable. They destroy competition, control the price of raw material and of the finished product, thus robbing both producer and consumer. They lessen the employment of labor and arbitrarily fix the terms and conditions thereof; and deprive individual energy and small capital of their opportunity for betterment. They are the most efficient means yet devised for appropriating the fruits of industry to the benefit of the few at the expense of the many, and, unless their insatiate greed is checked, all wealth will be aggregated in a few hands and the republic destroyed. The dishonest paltering with the trust evil by the Republican party in its State and national platforms is conclusive proof of the truth of the charge that trusts are the legitimate product of Republican policies, that they are fostered by Republican laws, and that they are protected by the Republican administration in return for campaign subscriptions and political support. We pledge the Democratic party to an unceasing warfare in nation, State, and city against private monopoly in every form. Existing laws against trusts must be enforced and more stringent ones must be enacted providing for publicity as to the affairs of corporations engaged in interstate commerce and requiring all corporations to show, before doing business outside of the State of their origin, that they have no water in their stock, and that they have not attempted and are not attempting to monopolize any branch of business or the production of any articles of merchandise; and the whole constitutional power of Congress over interstate commerce, the mails and all modes of interstate communication shall be exercised by the enactment of comprehensive laws upon the subject of trusts. Tariff laws should be amended by putting the products of trusts upon the free list, to prevent monopoly under the plea

of protection. The failure of the present Republican administration, with an absolute control over all the branches of the National Government, to enact any legislation designed to prevent or even curtail the absorbing power of trusts and illegal combinations, or to enforce the antitrust laws already on the statute books, proves the insincerity of the high-sounding phrases of the Republican platform. Corporations should be protected in all their rights and their legitimate interests should be respected, but any attempt by corporations to interfere with the public affairs of the people or to control the sovereignty which creates them should be forbidden under such penalties as will make such attempts impossible. We condemn the Dingley tariff law as a trust-breeding measure skillfully devised to give to the few favors which they do not deserve, and to place upon the many burdens which they should not bear. We favor such an enlargement of the scope of the interstate commerce law as will enable the commission to protect individuals and communities from discrimination and the public from unjust and unfair transportation rates.

"We reaffirm and indorse the principles of the national Democratic platform adopted at Chicago in 1896, and we reiterate the demand of that platform for an American financial system made by the American people for themselves, which shall restore and maintain a bimetallic price level, and as part of such system, the immediate restoration of the free and unlimited coinage of silver and gold at the present legal ratio of 16 to 1, without waiting for the aid or consent of any other nation. We denounce the currency bill enacted at the last session of Congress as a step forward in the Republican policy which aims to discredit the sovereign right of the National Government to issue all money, whether coin or paper, and to bestow upon national banks the power to issue and control the volume of paper money for their own benefit. A permanent national bank currency, secured by Government bonds, must have a permanent debt to rest upon, and, if the bank currency is to increase with population and business, the debt must also increase. The Republican currency scheme is, therefore, a scheme for fastening upon the taxpayers a perpetual and growing debt for the benefit of the banks. We are opposed to this private corporation paper circulated as money, but without legal tender qualities, and demand the retirement of national bank notes as fast as Government paper or silver certificates can be substituted for them. We favor an amendment to the Federal Constitution providing for the election of United States Senators by direct vote of the people, and we favor direct legislation wherever practicable. We are opposed to government by injunction; we denounce the blacklist, and favor arbitration as a means of settling disputes between corporations and their employees.

"In the interest of American labor and the upbuilding of the workingman as the corner stone of the prosperity of our country, we recommend that Congress create a Department of Labor, in charge of a secretary, with a seat in the Cabinet, believing that the elevation of the American laborer will bring with it increased production and increased prosperity to our country at home and to our commerce abroad. We are proud of the courage and fidelity of the American soldiers and sailors in all our wars; we favor liberal pensions to them and their dependents; and we reiterate the position taken in the Chicago platform in 1896, that the fact of enlistment and service shall be deemed conclusive evidence against disease and disability before enlistment.

"We favor the immediate construction, ownership, and control of the Nicaraguan Canal by the United States, and we denounce the insincerity of the plank in the Republican national platform for an isthmian canal, in the face of the failure of the Republican majority to pass the bill pending in Congress. We condemn the Hay-Pauncefote treaty as a surrender of American rights and interests, not to be tolerated by the American people. We denounce the failure of the Republican party to carry out its pledges to grant statehood to the Territories of Arizona, New Mexico, and Oklahoma, and we promise the people of those Territories immediate Statehood, and home rule during their condition as Territories; and we favor home rule and a territorial form of government for Alaska and Porto Rico. We favor an intelligent system of improving the arid lands of the West, storing the waters for the purposes of irrigation, and the holding of such lands for actual settlers. We favor the continuance and strict enforcement of the Chinese exclusion law and its application to the same classes of all Asiatic races.

"Jefferson said: 'Peace, commerce, and honest friendship with all nations, entangling alliances with none.' We approve this wholesome doctrine and earnestly protest against the Republican departure which has involved us in so-called world politics, including the diplomacy of Europe and the intrigue and land-grabbing in Asia, and we especially condemn the ill-concealed Republican alliance with England, which must discriminate against other friendly nations and which has already stifled the nation's voice while liberty is being strangled in Africa. Believing in the principles of self-government and rejecting, as did our forefathers, the claims of monarchy, we view with indignation the purpose of England to overwhelm with force the South African republics. Speaking, as we believe, for the entire American nation, except its Republican officeholders, and for all free men everywhere, we extend our sympathy to the heroic burghers in their unequal struggle to maintain their liberty and independence.

"We denounce the lavish appropriations of recent Republican congresses, which have kept taxes high and which threaten the perpetuation of the oppressive war levies. We oppose the accumulation of a surplus to be squandered in such barefaced frauds upon the taxpayers as the shipping subsidy bill, which under the false pretense of fostering American shipbuilding, would put unearned millions into the pockets of favorite contributors to the Republican campaign fund. We favor the reduction and speedy repeal of the war taxes, and a return to the time-honored Democratic policy of strict economy in governmental expenditures.

"Believing that our most cherished institutions are in great peril, that the very existence of our constitutional republic is at stake, and that the decision now to be rendered will determine whether or not our children are to enjoy those blessed privileges of free government which have made the United States great, prosperous, and honored, we earnestly ask for the foregoing declaration of principles the hearty support of the liberty-loving American people, regardless of previous party affiliations."

The Silver Republican National Convention, held at Kansas City, Mo., on July 6, the day following the Democratic convention, accepted the nomination of William J. Bryan for President, and referred the nomination of a candidate for Vice-President to its national committee, which indorsed the nomination of Adlai E. Stevenson. The following platform was adopted:

"We, the Silver Republican party, in national

convention assembled, declare these as our principles and invite the co-operation of all who agree therewith: We recognize that the principles set forth in the Declaration of Independence are fundamental and everlastingly true in their applications of governments among men. We believe the patriotic words of Washington's farewell to be the words of soberness and wisdom, inspired by the spirit of right and truth. We treasure the words of Jefferson as priceless gems of American statesmanship. We hold in sacred remembrance the broad philanthropy and patriotism of Lincoln, who was the great interpreter of American history and the great apostle of human rights and of industrial freedom, and we declare, as was declared by the convention that nominated the great emancipator, that the maintenance of the principles promulgated in the Declaration of Independence and embodied in the Federal Constitution, 'that all men are created equal; that they are endowed by their Creator with certain inalienable rights; that among these are life, liberty, and the pursuit of happiness; that to secure these rights governments are instituted among men, deriving their just powers from the consent of the governed,' is essential to the preservation of our republican institutions. We declare our adherence to the principle of bimetallicism as the right basis of a monetary system under our national Constitution, a principle that found place repeatedly in Republican platforms from the demonetization of silver in 1873 to the St. Louis Republican convention of 1896. Since that convention a Republican Congress and a Republican President, at the dictation of the trusts and money power, have passed and approved a currency bill which in itself is a repudiation of the doctrine of bimetallicism advocated theretofore by the President and every great leader of his party. This currency law destroys the full money power of the silver dollar, provides for the payment of all Government obligations and the redemption of all forms of paper money in gold alone; retires the time-honored and patriotic greenbacks, constituting one sixth of the money in circulation, and surrenders to banking corporations a sovereign function of issuing all paper money, thus enabling these corporations to control the prices of labor and property by increasing or diminishing the volume of money in circulation, thus giving the banks power to create panics and bring disaster upon business enterprises. The provisions of this currency law making the bonded debt of the republic payable in gold alone change the contract between the Government and the bondholders to the advantage of the latter, and is in direct opposition to the declaration of the Matthews resolution passed by Congress in 1878, for which resolution the present Republican President, then a member of Congress, voted, as did also all leading Republicans, both in the House and Senate. We declare it to be our intention to lend our efforts to the repeal of this currency law, which not only repudiates the ancient and time-honored principles of the American people before the Constitution was adopted, but is violative of the principles of the Constitution itself. and we shall not cease our efforts until there has been established in its place a monetary system based upon the free and unlimited coinage of silver and gold into money at the present legal ratio of 16 to 1 by the independent action of the United States, under which system all paper money shall be issued by the Government and all such money coined or issued shall be a full legal tender in payment of all debts, public and private, without exception. We are in favor of a graduated tax upon incomes, and if necessary to accomplish this

we favor an amendment to the Constitution. We believe that United States Senators ought to be elected by direct vote of the people, and we favor such amendment of the Constitution and such legislation as may be necessary to that end. We favor the maintenance and the extension wherever practicable of the merit system in the public service, appointments to be made according to fitness, competitively ascertained, and public servants to be retained in office only so long as shall be compatible with the efficiency of the service. Combinations, trusts, and monopolies contrived and arranged for the purpose of controlling the prices and quantity of articles supplied to the public are unjust, unlawful, and oppressive. Not only do these unlawful conspiracies fix the prices of commodities in many cases, but they invade every branch of the State and National Government with their polluting influence and control the actions of their employees and dependents in private life until their influence actually imperils society and the liberty of the citizen. We declare against them. We demand the most stringent laws for their destruction and the most severe punishment of their promoters and maintainers and the energetic enforcement of such laws by the courts. We believe the Monroe doctrine to be sound in principle and a wise national policy, and we demand a firm adherence thereto. We condemn acts inconsistent with it and that tend to make us parties to the interests and to involve us in the controversies of European nations and to recognition by pending treaty of the right of England to be considered in the construction of an interoceanic canal. We declare that such canal, when constructed, ought to be controlled by the United States in the interests of American nations. We observe with anxiety and regard with disapproval the increasing ownership of American lands by aliens and their growing control over our international transportation, natural resources, and public utilities. We demand legislation to protect our public domain, our natural resources, our franchises, and our internal commerce, and to keep them free and maintain their independence of all foreign monopolies, institutions, and influences, and we declare our opposition to the leasing of the public lands of the United States whereby corporations and syndicates will be able to secure control thereof and thus monopolize the public domain, the heritage of the people. We are in favor of the principles of direct legislation. In view of the great sacrifice made and patriotic services rendered we are in favor of liberal pensions to deserving soldiers, their widows, orphans, and other dependents. We believe that enlistment and service should be accepted as conclusive proof that the soldier was free from disease and disability at the time of his enlistment. We condemn the present administration of the pension laws. We tender to the patriotic people of the South African republics our sympathy, and express our admiration for them in their heroic struggle to preserve their political freedom and maintain their national existence. We declare the destruction of these republics and the subjugation of their people to be a crime against civilization. We believe this sympathy should have been voiced by the American Congress, as was done in the case of the French, Greeks, Hungarians, Poles, Armenians, and the Cubans, and as the traditions of this country would have dictated. We declare the Porto Rican tariff law to be not only a serious but a dangerous departure from the principles of our form of government. We believe in the republican form of government; and we are opposed to monarchy, and to the whole theory of imperialistic

control. We believe in self-government, a government by the consent of the governed; and are unalterably opposed to a government based upon force. It is incontrovertible that the inhabitants of the Philippine archipelago can not be made citizens of the United States without endangering our civilization. We are therefore in favor of applying to the Philippines the principle we are solemnly and publicly pledged to observe in the case of Cuba. We demand that our nation's promise to Cuba shall be fulfilled in every particular. There being no longer any necessity for collecting war taxes, we demand relief from the taxes levied to carry on the war with Spain. We favor the immediate admission into the Union of States of the Territories of Arizona, New Mexico, and Oklahoma. We believe the National Government should lend encouragement and assistance toward the reclamation of the arid lands of the United States; and to that end, we are in favor of a comprehensive survey thereof, and an immediate ascertainment of the water supply available for such reclamation, and we believe it to be the duty of the General Government to provide for the construction of storage reservoirs and irrigation works so that the water supply of the arid region may be utilized to the greatest possible extent in the interest of the people, while preserving all rights of the States. Transportation is a public necessity, and the means and methods of it are matters of public concern. Transportation companies exercise an unwarranted power over industries, business, and commerce, and should be made to serve the public interests without making unreasonable charges or unjust discriminations. We observe with satisfaction the growing sentiment among the people in favor of the public ownership and operation of public utilities. We are in favor of expanding our commerce in the interest of American labor and for the benefit of all our people by every honest and peaceful means. We are opposed to the importation of Asiatic laborers in competition with American labor; and favor a more rigid enforcement of the laws relating thereto. Our creed and our history justify the nations of the earth in expecting that, wherever the American flag is unfurled in authority, there human liberty and political freedom shall be found. We protest against the adoption of any policy that will change, in the thought of the world, the meaning of our flag. We insist that it shall never float over any ship or wave at the head of any column directed against the political independence of any people of any race or in any clime. The Silver Republican party of the United States, in the foregoing principles, seeks to perpetuate the spirit, and to adhere to the teachings of Abraham Lincoln."

The national committee of the Gold Democracy adopted the following resolutions at Indianapolis on July 25:

"Resolved, That in the opinion of this committee the nomination of candidates by the national Democratic party for the offices of President and Vice-President is unwise and inexpedient.

"Second, that we reaffirm the Indianapolis platform of 1896.

"Third, we recommend the State committees in their respective States to preserve their organizations and take such steps as in their opinion may best subserve the principles of our party, especially in the maintenance of a sound currency, the right of private contract, the independence of the judiciary, and the authority of the President to enforce Federal laws, a covert attack on which is made under the guise of the denunciation of government by injunction.

"We urge the voters not to be deceived by the plea that the money question has been finally settled. The specific reiteration of the demand for the free coinage of silver at the ratio of 16 to 1 by the Kansas City convention and the history known of all men in connection therewith emphasize the danger of this demand. We indorse the action of Congress in passing a bill embodying the gold standard as a step in the right direction. We feel it would be dangerous to elevate to executive power any one hostile to the maintenance and enforcement of this law."

A convention of the Anti-Imperialist League met in Indianapolis, Ind., approved the nomination of William J. Bryan for the presidency, and on Aug. 16 adopted the following platform:

"This Liberty Congress of Anti-Imperialists recognizes a great national crisis which menaces the republic, upon whose future depends in such large measure the hope of freedom throughout the world. For the first time in our country's history the President has undertaken to subjugate a foreign people and to rule them by despotic power. He has thrown the protection of the flag over slavery and polygamy in the Sulu Islands. He has arrogated to himself the power to impose upon the inhabitants of the Philippines government without their consent and taxation without representation. He is waging war upon them for asserting the very principles for the maintenance of which our forefathers pledged their lives, their fortunes, and their sacred honor. He claims for himself and Congress authority to govern the Territories of the United States without constitutional restraint.

"We believe in the Declaration of Independence. Its truths, not less self-evident to-day than when first announced by our fathers, are of universal application, and can not be abandoned while government by the people endures. We believe in the Constitution of the United States. It gives the President and Congress certain limited powers, and secures to every man within the jurisdiction of our Government certain essential rights. We deny that either the President or Congress can govern any person anywhere outside the Constitution. We are absolutely opposed to the policy of President McKinley which proposes to govern millions of men without their consent, which in Porto Rico establishes taxation without representation and government by the arbitrary will of a Legislature unfettered by constitutional restraint, and in the Philippines prosecutes a war of conquest, and demands unconditional surrender from a people who are of right free and independent. The struggle of men for freedom has ever been a struggle for constitutional liberty. There is no liberty if the citizen has no right which the Legislature may not invade, if he may be taxed by the Legislature in which he is not represented, or if he is not protected by fundamental law against the arbitrary action of executive power. The policy of the President offers the inhabitants of Porto Rico, Hawaii, and the Philippines no hope of independence, no prospect of American citizenship, no constitutional protection, no representation in the Congress which taxes them. This is the government of men by arbitrary power without their consent; this is imperialism. There is no room under the free flag of America for subjects. The President and Congress, who derive all their powers from the Constitution, can govern no man without regard to its limitations. We believe the greatest safeguard of liberty is a free press, and we demand that the censorship in the Philippines, which keeps from the American people the knowledge of what is done in their name,

be abolished. We are entitled to know the truth, and we insist that the powers which the President holds in trust for us shall be not used to suppress it. Because we thus believe we oppose the re-election of Mr. McKinley. The supreme purpose of the people in this momentous campaign should be to stamp with their final disapproval his attempt to grasp imperial power. A self-governing people can have no more imperative duty than to drive from public life a Chief Magistrate who, whether in weakness or of wicked purpose, has used his temporary authority to subvert the character of their Government and to destroy their national ideals. We, therefore, in the belief that it is essential at this crisis for the American people again to declare their faith in the universal application of the Declaration of Independence and to reassert their will that their servants shall not have or exercise any powers whatever other than those conferred by the Constitution, earnestly make the following recommendations to our countrymen:

"First, that, without regard to their views on minor questions of domestic policy, they withhold their votes from Mr. McKinley, in order to stamp with their disapproval what he has done. Second, that they vote for those candidates for Congress in their respective districts who will oppose the policy of imperialism. Third, while we welcome any other method of opposing the re-election of Mr. McKinley, we advise direct support of Mr. Bryan as the most effective means of crushing imperialism.

"We are convinced of Mr. Bryan's sincerity and of his earnest purpose to secure to the Filipinos their independence. His position and the declarations contained in the platform of his party on the vital issue of the campaign meet our unqualified approval. We recommend that the executive committees of the American Anti-Imperialist League and its allied leagues continue and extend their organizations, preserving the independence of the movement, and that they take the most active possible part in the pending political campaign. Until now the policy which has turned the Filipinos from warm friends to bitter enemies, which has slaughtered thousands of them and laid waste their country, has been the policy of the President. After the next election it becomes the policy of every man who votes to re-elect him, and who thus becomes with him responsible for every drop of blood thereafter shed. Resolved, that in declaring that the principles of the Declaration of Independence apply to all men, this Congress means to include the negro race in America as well as the Filipinos. We deprecate all efforts, whether in the South or in the North, to deprive the negro of his rights as a citizen under the Declaration of Independence and the Constitution of the United States."

About one hundred volunteer delegates from several States met in Carnegie Hall, New York city, Sept. 5, and nominated Senator Donelson Caffery, of Louisiana, for President, and Archibald Murray Howe, of Cambridge, Mass., for Vice-President. The Committee on Platform, composed of Prof. Francis P. Nash, of Hobart College; Louis D. Lacroix, of Oxford, N. C.; Prof. Edward G. Bourne, of Yale; W. F. Lloyd, of New York city; and Edward Waldo Emerson, of Concord, Mass., presented the following platform, which was adopted:

"We, citizens of the United States of America, assembled for the purpose of defending the wise and conservative principles which underlie our Government, thus declare our aims and purposes: We find our country threatened with alternative

STATES.	Republican.	Democratic.	Prohibitionist.	Social-Democrat.	Socialist-Labor.	Middle-of-the-Road Populist.	Union Reform.	United Christian.	Plurality.	McKinley.	Bryan.
Alabama.....	55,512	97,181	2,762	.....	.....	4,178	.....	.....	41,619 D	.....	11
Arkansas.....	44,800	81,142	584	.....	.....	972	341	.....	86,342 D	.....	8
California.....	164,755	124,985	5,024	7,554	.....	.....	.....	.....	39,770 R	9	.....
Colorado.....	98,072	122,738	3,790	654	700	887	.....	.....	29,661 D	.....	4
Connecticut.....	102,567	73,997	1,617	1,029	908	.....	.....	.....	28,570 R	6	.....
Delaware.....	22,529	18,858	588	57	.....	.....	.....	.....	3,671 R	3	.....
Florida.....	7,314	28,007	1,089	601	.....	1,070	.....	.....	21,698 D	.....	4
Georgia.....	36,085	81,700	1,396	.....	.....	4,584	.....	.....	46,665 D	.....	18
Idaho.....	27,198	29,646	837	.....	.....	213	.....	.....	2,448 D	.....	3
Illinois.....	597,966	508,061	17,626	9,687	1,873	1,141	672	362	94,924 R	24	.....
Indiana.....	336,063	309,584	13,718	2,374	663	1,488	254	.....	26,479 R	15	.....
Iowa.....	307,818	309,466	9,502	1,643	259	613	.....	707	98,353 R	13	.....
Kansas.....	186,965	162,001	3,006	1,605	.....	.....	.....	.....	23,354 R	10	.....
Kentucky.....	227,128	235,103	3,780	646	890	1,861	.....	.....	7,975 D	.....	13
Louisiana.....	14,293	53,671	.....	.....	.....	.....	.....	.....	39,438 D	.....	8
Maine.....	65,435	36,822	2,585	878	.....	.....	.....	.....	28,613 R	6	.....
Maryland.....	136,212	122,271	4,582	908	391	.....	147	.....	13,941 R	8	.....
Massachusetts.....	238,966	156,990	6,202	9,607	2,599	.....	.....	.....	81,369 R	15	.....
Michigan.....	310,269	211,585	11,859	2,326	903	883	.....	.....	104,584 R	14	.....
Minnesota.....	188,915	111,400	8,407	2,043	1,353	.....	.....	.....	77,506 R	9	.....
Mississippi.....	6,753	81,706	.....	.....	.....	1,644	.....	.....	45,823 D	.....	9
Missouri.....	814,091	851,912	5,965	6,128	1,294	4,244	.....	.....	87,621 D	.....	17
Montana.....	25,373	37,146	208	708	.....	.....	.....	.....	11,773 D	.....	3
Nebraska.....	121,835	114,013	3,655	823	.....	1,104	.....	.....	7,922 R	8	.....
Nevada.....	3,860	6,376	.....	.....	.....	.....	.....	.....	2,516 D	.....	3
New Hampshire.....	54,803	35,459	1,270	700	.....	.....	.....	.....	19,314 R	4	.....
New Jersey.....	221,707	164,608	7,188	4,609	2,074	669	.....	.....	56,599 R	10	.....
New York.....	821,992	678,286	22,043	12,669	12,622	.....	.....	.....	143,606 R	36	.....
North Carolina.....	133,081	157,752	1,006	.....	.....	890	.....	.....	24,071 D	.....	11
North Dakota.....	86,891	20,519	731	518	.....	110	.....	.....	15,372 R	3	.....
Ohio.....	543,918	474,882	10,203	4,847	1,688	251	4,284	.....	69,030 R	23	.....
Oregon.....	46,526	33,385	2,536	1,466	.....	269	.....	.....	13,141 R	4	.....
Pennsylvania.....	712,665	424,232	27,908	4,631	2,998	628	.....	.....	288,433 R	82	.....
Rhode Island.....	33,784	19,812	1,529	.....	1,423	.....	.....	.....	13,972 R	4	.....
South Carolina.....	3,579	47,256	.....	.....	.....	.....	.....	.....	43,657 D	.....	9
South Dakota.....	54,530	39,544	1,542	176	.....	239	.....	.....	14,986 R	4	.....
Tennessee.....	121,194	144,751	3,900	410	.....	1,368	.....	.....	23,557 D	.....	12
Texas.....	121,173	267,337	2,644	.....	.....	20,970	.....	1	46,164 D	.....	15
Utah.....	47,139	45,006	.....	.....	.....	.....	.....	.....	2,133 R	3	.....
Vermont.....	42,568	12,649	868	.....	.....	367	.....	.....	29,719 R	4	.....
Virginia.....	115,365	146,080	2,150	.....	.....	.....	.....	.....	30,215 D	.....	12
Washington.....	57,456	44,633	2,368	2,006	866	.....	.....	.....	12,623 R	4	.....
West Virginia.....	119,851	98,791	1,686	296	.....	274	.....	.....	21,068 R	6	.....
Wisconsin.....	265,960	159,285	10,124	524	7,065	.....	.....	.....	106,581 R	12	.....
Wyoming.....	14,517	10,298	.....	.....	.....	.....	.....	.....	4,219 R	3	.....
Total.....	7,206,677	6,574,397	208,555	84,003	39,537	50,373	5,698	1,060	.....	292	155

perils. On the one hand is a public opinion misled by organized forces of commercialism that have perverted a war intended by the people to be a war of humanity into a war of conquest. On the other is a public opinion swayed by demagogic appeals to factional and class passions, the most fatal of diseases to a republic. We believe that either of these influences, if unchecked, would ultimately compass the downfall of our country, but we also believe that neither represents the sober conviction of our countrymen. Convinced that the extension of the jurisdiction of the United States for the purpose of holding foreign people as colonial dependents is an innovation dangerous to our liberties and repugnant to the principles upon which our Government is founded, we pledge our earnest efforts through all constitutional means, first, to procure the renunciation of all imperial or colonial pretensions with regard to foreign countries claimed to have been acquired through or in consequence of military or naval operations of the last two years. Second, we further pledge our efforts to secure a single gold standard and a sound banking system. Third, to secure a public service based on merit only. Fourth, to secure the abolition of all corrupting special privileges, whether under the guise of subsidies, bounties, undeserved pensions or trust-breeding tariffs."

Senator Caffery and Mr. Howe declined on Sept. 21, and on Sept. 26 it was decided to make no other nominations.

The presidential election took place on Nov. 6. The total popular vote was 13,970,300. McKinley received a majority of 443,054 of all the votes cast. His plurality over Bryan was 832,280. In the electoral colleges his majority was 137. The

table above gives the popular vote for the various candidates—Republican, Democratic, Prohibitionist, Social-Democrat, Socialist-Labor, Middle-of-the-Road Populist, Union Reform, and United Christian—in the several States, the Republican or Democratic plurality in each State and the electoral vote cast in each State for McKinley or Bryan.

The Alaska Boundary.—The *modus vivendi* arranged with Great Britain on Oct. 20, 1899, called for the marking of certain provisional boundary points for convenience of administration around the head of Lynn Canal. It was stipulated that the citizens or subjects of either power found by the arrangement within the temporary jurisdiction of the other shall suffer no diminution of the rights or privileges that they have hitherto enjoyed. The Dominion of Canada made rules and regulations to secure to American miners and others transferred to Canadian jurisdiction all property and other rights that they possessed under American laws. The demarcation of the temporary boundary was completed by a joint survey in July, 1900. Canada, on the theory that in the conventional boundary 10 marine leagues inland the continental coast line is to be followed, leaping from headland to headland, claimed control of all water access to the Klondike gold fields by the Dalton trail, White pass, and Chilkoot pass, control of all the Lynn Canal, and also of Skagway and Dyea. The desire of the Canadian Government was to get a deep-water harbor and port of entry, and it offered to surrender its claim to Dyea and Skagway if the United States would concede to it Pyramid harbor. When this was refused Canada proposed

arbitration, to which the United States would not agree, as it would imply an admission that its contention that the coast line mentioned in the treaty follows the sinuosities of the coast admitted of doubt and would probably result in a compromise line. Before a *modus vivendi* was arranged Canadian mounted police were in Dyea and Skagway, and a Canadian Government office was established in one of those places. The United States sent troops to both towns, and both governments attempted to exercise jurisdiction. Disputes arose constantly, and the legal tenure of mining lands was subject to doubt. The provisional boundary leaves these places and the head of navigation within the jurisdiction of the United States. The line leaves in American control also the Indian village of Klukwan, on Chilkoot river, although it is about 10 miles within the boundary claimed by the United States. The boundary commissioners placed monuments at the points along the line where access can be had to the interior—at White pass, Chilkoot pass, on the Klehini river, and on Porcupine creek. The boundary of Alaska where it follows the meridian of 141° west of Greenwich has been surveyed independently by United States and Canadian officers by sidereal observations, and the results at several points show discrepancies in no place exceeding 700 feet. A convention was concluded with Great Britain in 1898 for a joint survey on which the Senate failed to take action, and in 1900 negotiations were opened by the Department of State for a new convention to provide for a joint determination of the meridian by telegraphic observations.

The Interoceanic Canal.—Secretary Hay and Lord Pauncefote on Feb. 5, 1900, signed at Washington a convention to take the place of the articles concerning the projected isthmian canal that are contained in the Clayton-Bulwer treaty, ratified in 1850. In that treaty it was stipulated that neither the United States nor Great Britain shall obtain or maintain for itself any exclusive control over a ship canal. In the new convention this provision was abrogated, and Great Britain conceded to the United States the right to build and maintain such a canal, and the United States undertook to maintain the neutrality of the proposed canal and keep it perpetually open to the ships of all nations in peace and war. The treaty was not ratified by the Senate in its original form, but with amendments, and negotiations were begun in December to secure its acceptance by Great Britain in its amended form. The text as amended is as follows:

"ARTICLE I. It is agreed that the canal may be constructed under the auspices of the Government of the United States, either directly at its own cost or by gift or loan of money to individuals or corporations or through subscriptions to or purchase of stock or shares, and that, subject to the provisions of the present convention, the said government shall have and enjoy all the rights incident to such construction as well as the exclusive right of providing for the regulation and management of the canal.

"ART. II. The high contracting parties, desiring to preserve and maintain the 'great principle' of neutralization established in Article VIII of the Clayton-Bulwer convention, which convention is hereby superseded, adopt as the basis of such neutralization the following rules substantially as embodied in the convention between Great Britain and certain other powers signed at Constantinople Oct. 28, 1888, for the free navigation of the Suez maritime canal—that is to say:

"First, the canal shall be free and open in time of war as in time of peace to vessels of

commerce and of war of all nations on terms of entire equality, so that there shall be no discrimination against any nation or its citizens or subjects in respect of the conditions or charges of traffic or otherwise.

"Second, the canal shall never be blockaded, nor shall any right of war be exercised nor any act of hostility be committed within it.

"Third, vessels of war of a belligerent shall not revictual nor take any stores in the canal except so far as may be strictly necessary, and the transit of such vessels through the canal shall be effected with the least possible delay in accordance with the regulations in force and with only such intermission as may result from the necessities of the service. Prizes shall be in all respects subject to the same rules as vessels of war of the belligerents.

"Fourth, no belligerent shall embark or disembark troops, munitions of war, or warlike materials in the canal except in case of accidental hindrance of the transit, and in such case the transit shall be resumed with all possible dispatch.

"Fifth, the provisions of this article shall apply to waters adjacent to the canal, within three marine miles of either end. Vessels of war of a belligerent shall not remain in such waters longer than twenty-four hours at any one time except in case of distress, and in such case shall depart as soon as possible; but a vessel of war of one belligerent shall not depart within twenty-four hours from the departure of a vessel of war of the other belligerent.

"It is agreed, however, that none of the immediately foregoing conditions and stipulations in sections numbered 1, 2, 3, 4, and 5 of this article shall apply to measures which the United States may find it necessary to take for securing by its own forces the defense of the United States and the maintenance of public order.

"Sixth, the plant, establishments, buildings, and all works necessary to the construction, maintenance, and operation of the canal shall be deemed to be part thereof for the purposes of this convention, and in time of war, as in time of peace, shall enjoy complete immunity from attack or injury by belligerents and from acts calculated to impair their usefulness as part of the canal.

"Seventh, no fortifications shall be erected commanding the canal or the waters adjacent. The United States, however, shall be at liberty to maintain such military police along the canal as may be necessary to protect it against lawlessness and disorder."

The contract of the Maritime Canal Company, which undertook to construct a canal by piercing the Isthmus of Nicaragua, was declared forfeit by the Nicaraguan Government for nonexecution in October, 1899. That Government refused to reopen the question of the forfeiture, and subsequently declared the Eyre-Cragin option void also for nonpayment of the stipulated advance. Deeming itself relieved from all existing engagements, the Nicaraguan Government showed a disposition to deal freely with the canal question either by entering into arrangements with the United States or by taking independent measures to promote the construction of the water way. A proposed agreement, conditional on the abrogation of the obligations of the United States toward Great Britain under the Clayton-Bulwer treaty, gives to the United States the absolute right to build and operate and to police the canal.

The Supreme Court.—The Supreme Court is composed as follows: Chief Justice, Melville W. Fuller, of Illinois, appointed in 1888. Associate

Justices, John M. Harlan, of Kentucky, appointed in 1877; Horace Gray, of Massachusetts, appointed in 1881; David J. Brewer, of Kansas, appointed in 1889; Henry B. Brown, of Michigan, appointed in 1890; George Shiras, Jr., of Pennsylvania, appointed in 1892; Edward L. White, of Louisiana, appointed in 1894; Rufus W. Peckham, of New York, appointed in 1895; and Joseph McKenna, of California, appointed in 1897.

At the close of the October term, 1898, 308 cases were not disposed of. The number of cases docketed at the October term, 1899, was 384, and 375 cases were disposed of during the term. The number actually considered by the court was 328, of which 174 were argued orally and 154 submitted on printed arguments.

Some of the more important cases decided were as follows:

The Texas Antitrust Law.—In *Waters-Pierce Oil Company vs. Texas*, decided March 19, 1900, the court held as follows: It is well settled that a State has the power to impose such conditions as it pleases upon foreign corporations seeking to do business within it. The statute of Texas of March 30, 1890, prohibiting foreign corporations that violated the provisions of that act from doing any business within the State, imposed conditions which it was within the power of the State to impose.

Texas vs. Houston and Texas Central Railroad Company.—This was a suit brought by the State of Texas to recover \$673,000 from the Houston and Texas Central Railroad Company for loans from the school fund of the State prior to the civil war, which the company claimed to have paid. The payments were made by the company in Treasury warrants issued by the State under authority of acts passed in 1863 and 1864. The State officials declared that the payments were void on account of having been made in warrants issued in violation of the provision of the Constitution that no State should emit bills of credit; that they were in violation of the provision of the Texas Constitution, which forbade the issue of warrants to circulate as money, and that they were issued in aid of the rebellion, and therefore illegal. The State courts sustained the State officials in all except the contention that the warrants were issued in aid of the rebellion. The Supreme Court decided that the warrants were not issued in violation of the Federal and State Constitutions, and that the payments of the railroad company were valid. Mr. Justice Brown, concurring in the judgment of the court, dissented from that part which held the warrants were not bills of credit and used as money. But it was too late now, he said, for the State to repudiate them. To do so would be a plain violation of public faith.

The Bankruptcy Law.—The case of *Bardes vs. the Hawarden Bank* involved the question of jurisdiction of the United States district court under the present bankruptcy law. The court held that the provisions of the second clause of section 23 of the bankrupt act of 1898 control and limit the jurisdiction of all courts, including the several district courts of the United States, over suits brought by trustees in bankruptcy to recover or collect debts due from third parties or to set aside transfers of property to third parties, alleged to be fraudulent as against creditors, including payments in money or property to preferred creditors.

The Minnesota Railroad Law.—In the Wisconsin, Minnesota and Pacific Railroad Company vs. Jacob F. Jacobson, the opinion of the State court was affirmed, upholding the law. The case involves the validity of the Minnesota State law requiring intersecting railroad lines crossing each

other at grade to make "Ys" connecting the two. The law was attacked upon the ground that it is a violation of the interstate commerce clause of the Constitution. Justices White and McKenna joined in a dissenting opinion. Justice White said the opinion was far reaching in its effect, and amounted to saying that private property might be taken for public use without any compensation whatever.

Governorship of Kentucky.—Taylor and Marshall vs. Beckham was decided May 21, 1900. This was an action in the nature of *quo warranto*, brought under the statutes of Kentucky by J. C. W. Beckham against William S. Taylor and John Marshall for usurpation of the offices of Governor and Lieutenant Governor of Kentucky. The determination of contests of the election of Governor and Lieutenant Governor in that State is committed to the General Assembly. The court dismissed the writ of error and declined to take jurisdiction. The Chief Justice in delivering the opinion quoted from the decision of the court in *Luther vs. Borden* as follows: "The high power has been conferred on this court of passing judgment upon the acts of the State sovereignties, and of the legislative and executive branches of the Federal Government, and of determining whether they are beyond the limits of power marked out for them respectively by the Constitution of the United States. This tribunal, therefore, should be the last to overstep the boundaries which limit its own jurisdiction. And while it should always be ready to meet any question confided to it by the Constitution, it is equally its duty not to pass beyond its appropriate sphere of action, and to take care not to involve itself in discussions which properly belong to other forums."

Insurance.—New York Life Insurance Company vs. Cravens. The contract for life insurance in this case, made by a New York insurance company in the State of Missouri with a citizen of that State, is subject to the laws of that State regulating life insurance policies, although the policy declares "that the entire contract contained in the said policy and in this application, taken together, shall be construed and interpreted as a whole and in each of its parts and obligations according to the laws of the State of New York, the place of the contract being expressly agreed to be the principal office of the said company in the city of New York." The power of a State over foreign corporations is not less than the power of a State over domestic corporations.

Legacy Tax Cases.—Knowlton vs. Moore was decided May 14, 1900. The contention was that the legacy tax was unconstitutional, on the following grounds: That it constitutes a direct tax; that it is not uniform for the reason that it exempts from its operation legacies under the value of \$10,000, and because it provides for a progressive tax, and is invalid on other grounds of inequality and want of uniformity, and that the right of inheritance is a privilege or franchise within the exclusive power of the State to grant and regulate, and not subject to abridgment or taxation by the General Government. Another point involved was, that the tax does not attach to any individual legacy unless such legacy exceeds the sum of \$10,000. The decision, delivered by Justice White, sustained the constitutionality of the law, holding that the tax was not a direct tax within the meaning of the Constitution, but, on the contrary, a duty or excise. The uniformity clause of the Constitution was held to relate only to geographical uniformity. It was decided that legacies not exceeding \$10,000 were not taxable.

and that the rate of tax was progressively increased by the amount of each separate legacy or distributive share, and not by the whole amount of the personal estate of the deceased from which the legacies or distributive shares were derived.

In *Plummer vs. Coler* the question involved was whether, under the inheritance-tax laws of a State, a tax may be validly imposed on a legacy consisting of United States bonds, issued under a statute declaring them to be exempt from State taxation in any form. It was held that the right to take property by will or descent is derived from and regulated by municipal law, and in assessing a tax upon such right or privilege the State may lawfully measure or fix the amount of the tax by referring to the value of the property passing; and the incidental fact that such property is composed, in whole or in part, of Federal securities, does not invalidate the State tax or the law under which it is imposed.

In the cases of *Murdock, executor, vs. Ward, collector*, and *Sherman vs. the United States*, it was held that legacies consisting of United States bonds were subject to the United States legacy tax.

Tax on Express Packages.—The cases of the *American Express Company vs. Michigan* and *Crawford vs. Hubbell*, treasurer of Adams Express Company, involved the question whether the shipper or the carrier shall pay for the stamp which the war revenue act requires on receipts of goods accepted for carriage and transportation. The cases arose from an effort to compel express companies to accept packages for transportation without requiring the shipper to provide or pay for a revenue stamp in addition to the usual or ordinary charges that existed before July 1, 1898, when the act went into effect. The court held that express companies are not forbidden to shift the burden of the stamp tax by an increase of rates which are not unreasonable.

Chinese Certificates.—In *United States vs. Mrs. Gue Lim* the question was raised whether a wife, or minor children, of Chinese merchants who are already domiciled in this country may enter the United States without the certificates prescribed by section 6 of the act of July 5, 1894. The court held that a certificate is not necessary in either case.

Removal from Office.—In *Keim vs. United States*, decided April 9, 1900, it was held that the courts have no general supervising power over the action of the executive departments of the Government in discharging one of the clerks therein, and that the power of removal from office is incident to the power of appointment.

War Prize Cases.—The court decided several prize cases, among them the following: The *Panama* sailed from New York for Havana with a general cargo on April 20, 1898, and was captured on the 25th while approaching Havana. She was condemned in the court below, on the ground that, since by the act of Congress of April 25, 1898, and by the Executive proclamation on the succeeding day, it was determined that the war with Spain began on April 21, including that day, all Spanish property afloat captured from that time became liable to condemnation, and that this vessel was not exempt under any provision of the Executive proclamation. The majority of the Supreme Court affirmed the condemnation and found that the *Panama* was not entitled to the exemption of Article IV of the proclamation because, being under a contract with the Spanish Government, which attached her provisionally to the naval reserve, she carried an armament susceptible of use for hostile purposes, and was liable, upon arrival at the enemy's port of destination, to be

appropriated for such purposes. No general rule of international law exempts mail ships from capture as prize of war.

The *Adula*, decided Feb. 26, 1900, was a British steamer owned by the Atlas Steamship Company, of Kingston, Jamaica, leased to a Spanish citizen for carrying refugees from Guantanamo, Cuba. The vessel was captured June 29, 1898, when entering Guantanamo Bay, and was condemned as a prize vessel. The court held that Admiral Sampson's blockade was effective; that the purpose of the voyage was pecuniary and not charitable, and that the vessel was a lawful prize. If a master has actual notice of a blockade, he is not at liberty even to approach the blockaded port for the purpose of making inquiries. If a neutral vessel be chartered to an enemy, she becomes to a certain extent and *pro hac vice* an enemy's vessel, and a notice to her charterer of the existence of a blockade is a notice to the vessel. Justices Shiras, Gray, White, and Peckham dissented.

The *Benito Estenger* was decided March 5. This was a Spanish vessel, but was sailing under the English flag after transfer from the Spanish owner to the neutral, and was captured off Cape Cruz, on the south coast of Cuba. She was condemned in the court below, and that condemnation was affirmed by the Supreme Court, three justices dissenting. The transfer to the neutral was found to be merely colorable. The former, or rather the real owner, a Cuban subject of Spain, declared that he was an adherent of the insurgent cause, and therefore an ally of the United States rather than a loyal subject of Spain. The court applied the general doctrine that in time of war citizens or subjects of the belligerents are enemies to each other, without regard to individual sentiments or dispositions, and that political status determines the question of enemy ownership.

The *Carlos F. Roses*, decided May 14, was a Spanish bark, and was proceeding from Montevideo to Havana, with a cargo of jerked beef and garlic. She was captured in the Bahama Channel by the cruiser *New York*, and was duly condemned as enemy property. Neutral bankers claimed the cargo, on the ground that they had made advances upon the security of the bills of lading indorsed in blank, and were wholly unindemnified except through insurers, who would be subrogated to their own rights. The majority of the Supreme Court found that the transactions, so far as they were shown, presented evidence of an enemy interest which called upon the asserted neutral owners to prove beyond question their right and title, which they had not sufficiently done within the rules established by the authorities. The court averted to the fact that provisions, by the modern law of nations, may become contraband, although belonging to a neutral, on account of the particular situation of the war or on account of their destination, as for military use at ports of naval or military equipment.

Dewey's Bounty Claims.—*Dewey vs. the United States*. The original suit was brought in the Court of Claims to recover bounty money earned by the commanding officer of the American fleet at the battle of Manila, on May 1, 1898. In fixing the amount of the bounty it was necessary to determine whether the Spanish vessels engaged at Manila were of superior or inferior force to the American fleet, and to determine, as matter of law, whether, in determining the relative strength of the two fleets, the land batteries and mines and torpedoes of the Spanish should be taken into consideration in arriving at the strength of the Spanish fleet. The Court of Claims held that the land batteries and mines and torpedoes should not be considered

in determining the question whether the Spanish forces were of superior or inferior force, and found the fleet to be inferior to the American vessels. The Supreme Court affirmed this judgment. Chief-Justice Fuller delivered a dissenting opinion, contending for a liberal construction of the statute, in which Justices White and McKenna joined.

The Constitution of Utah.—In *Maxwell vs. Dow* the court decided that the provisions of the Constitution of the State of Utah allowing proceedings in criminal cases to be prosecuted upon the process of "information," and limiting juries in certain cases to 8 persons instead of requiring the common law jury of 12, were not in contravention of the Federal Constitution. The decision fully explained what are the privileges and immunities of a citizen of the United States which no State can abridge. Justice Harlan dissented, saying that under this decision, if he did not misapprehend its effect, the Constitution did not stand in the way of any State striking down guarantees of life and liberty which English-speaking peoples have for centuries regarded as vital to personal security.

Jim Crow Cars.—The case of the Chesapeake and Ohio Railway Company *vs.* Kentucky was decided Dec. 3. It involved the question of the constitutionality of the Kentucky State law providing separate coaches for colored passengers. The opinion sustained the validity of the act. Justice Harlan dissented, holding that the law was an interference with interstate commerce, and that the Kentucky Legislature had no right to classify citizens by color in railway coaches.

Restraint on Commerce.—Cleveland, Cincinnati, Chicago and St. Louis Railway Company *vs.* Illinois involved the constitutionality of the State law of Illinois requiring all trains to stop at county seats in the State. As it appeared that the company furnished four regular passenger trains each way, sufficient to accommodate all local and through business, and that all such trains stopped at county seats, the act was held to be invalid as applied to an express train intended only for through passengers from St. Louis to New York. While railways are bound to provide adequately for the accommodation of those to whom they are directly tributary, they have the legal right, after all these local conditions have been met, to adopt special provisions for through traffic, and legislative interference therewith is an infringement on the constitutional requirement that commerce between the States shall be absolutely free and unobstructed.

Cigarettes.—Austin *vs.* State of Tennessee involved the constitutionality of the Tennessee law which forbids the sale or importation for sale of cigarettes. The case grew out of the importation of cigarettes into Tennessee from North Carolina, the packages being shipped in open baskets. The Tennessee dealers claimed the right to sell the separate packages, under the decision of the Supreme Court made several years ago, that no State can restrain the sale of an original package of an article of interstate commerce without encroaching upon the exclusive right of Congress to regulate commerce between the States. The Supreme Court affirmed that portion of the decision of the court of Tennessee which held that the sale of cigarettes involved in this case was not of an original package, but did not affirm that part of the decision holding that cigarettes are not legitimate articles of commerce. The Supreme Court did not undertake to define what is an original package further than to hold that the ordinary package of 10 or 20 cigarettes, such as is retailed to smokers, is not an original package. Four justices dissented.

UNITED STATES, FINANCES OF THE.

Notwithstanding the extraordinary military expenses incurred in the pacification of the Philippine Islands and the increase of the navy, the excess of the revenues of the Government for the fiscal year ending June 30, 1900, over the expenditures for the same period was \$79,527,060. There was an increase in receipts of internal revenue of \$21,890,765; of customs, \$27,036,389; and from the postal service, \$8,460,297. For the same period there was a decrease in the expenses of the military establishment of the Government as follows: The pay department of the army, \$37,637,023; the quartermaster's department, \$33,548,260; the medical department, \$8,605,738. There was also a decrease in the expenditures of the State Department of \$20,000,000 on account of foreign intercourse, that being the amount paid to Spain the previous year on account of the treaty obligation. The only notable increase of expenditures was \$4,121,037 for an increase of the navy.

The table on page 726 shows in detail the items of receipts and expenditures by the Government for the past fiscal year, compared with like items of the previous year.

The surplus arising from these operations was applied in part to the redemption of the \$25,364,500 outstanding 2-per-cent. bonds of the Government, and to paying a premium of \$33,147,055 on 3-, 4-, and 5-per-cent. bonds exchanged for 2-per-cent. bonds, as authorized by the act of March 14, 1890. This premium is in effect the anticipation of interest on the public debt to its amount, and in the end will be a net saving to the Government of about \$6,000,000. Considering the favorable relation of receipts to expenditures and its probable continuance and the large available balance of cash, recommendation is made by the Secretary of the Treasury for a moderate reduction of the war taxes.

The act of March 14, 1890, above referred to, authorized the funding of certain 3-, 4-, and 5-per-cent. bonds into 2-per-cent. gold bonds payable at the pleasure of the Government after thirty years from their issue, the outstanding bonds to be received in exchange therefor at a value not greater than their present worth to yield an income of 2½ per cent. per annum. The new bonds were authorized to be received by the Government from national banks, and bank notes to be issued thereon to the par value of the bonds deposited. Under this authority new national banks were organized throughout the country, which took out circulation, and existing banks largely converted their bonds deposited for circulation into the new bonds, that they might secure the issue of notes on the more favorable terms offered.

OBLIGATIONS.	Interest rate.	OUTSTANDING DEC. 31.	
		1900.	1899.
Consols of 1890.....	2	\$419,679,750	.....
Loan of 1908-'18.....	3	104,900,040	\$198,679,000
Funded loan of 1907.....	4	287,573,100	543,908,650
Refunding certificates....	4	84,380	37,170
Loan of 1925.....	4	162,815,400	162,815,400
Loan of 1904.....	5	26,992,100	85,009,700
Funded loan, continued.	2	.....	25,364,500
Old loans matured.....	..	2,654,070	1,908,500
Old demand notes.....	..	53,847	53,847
National bank redemption account.....	..	31,531,532	36,399,218
Fractional notes.....	..	0,572,419	0,680,593
Total.....		\$1,042,617,698	\$1,071,214,444

With the exception of an increase of about \$100,000,000 in the holdings of gold, there is no marked change in the assets of the Treasury dur-

RECEIPTS.

SOURCES.	YEAR ENDING JUNE 30,	
	1900.	1899.
Customs.....	\$283,164,871	\$206,128,482
Internal revenue.....	295,327,927	273,437,162
Profit on coinage, bullion, deposits, etc.....	9,992,374	6,164,256
District of Columbia.....	4,008,723	4,016,582
Sinking fund for Pacific railways.....		274,887
Fees, consular, letters patent, and land.....	3,291,717	2,805,435
Customs, fees, fines, penalties, etc.....	675,707	668,072
Tax on national banks.....	1,998,554	1,912,411
Navy Pension and Navy Hospital funds, etc.....	1,621,558	1,343,564
Dividend received account Kansas Pacific Railroad.....	821,896	
Payment of interest by Pacific railways.....	1,173,466	441,247
Sales of lands and buildings.....	3,842,738	
Sales of Indian lands.....	1,884,663	1,476,175
Sales of public lands.....	2,886,898	1,678,247
Part payment Pacific Railroad indebtedness.....	3,389,016	
Immigrant fund.....	587,405	398,439
Miscellaneous.....	3,224,352	15,210,711
Postal service.....	102,354,579	95,011,384
Total ordinary receipts.....	\$669,595,431	\$610,982,004
Loans and Treasury notes.....	510,558,056	522,490,720
Gross receipts.....	\$1,180,153,487	\$1,133,472,724

ing the year. The reserve fund of \$150,000,000 is now, under the law, separately reported, leaving for the available cash balance of the Treasury on Dec. 31, 1900, \$140,107,336. The remainder of the entire assets is held in trust to meet the payment of certificates, checks, coupons, or other demand obligations of the Government, and can not be used for any other purpose. The following table shows by items the assets and liabilities of the Government on Dec. 31, 1900, and similar items for the previous year:

ITEMS.	YEAR ENDING DEC. 31,	
	1900.	1899.
<i>Assets:</i>		
Gold coin and bullion.....	\$479,749,251	\$398,032,027
Silver dollars or bullion.....	493,766,951	494,208,389
United States notes.....	12,093,521	28,411,652
Treasury notes (1890).....	166,841	1,385,929
National bank notes.....	7,962,450	4,275,580
Balances in national bank deposits.....	96,899,694	87,308,173
Gold certificates.....	30,841,450	23,721,822
Silver certificates.....	5,095,597	6,423,698
Bonds and interest checks paid.....	449,810	564,043
Currency certificates.....	30,000	370,000
Minor coins and fractional notes.....	448,777	317,389
Subsidiary silver coins.....	4,446,010	2,992,400
Total.....	\$1,181,271,552	\$1,048,006,042
<i>Liabilities:</i>		
Gold certificates.....	\$393,629,379	\$184,844,619
Silver certificates.....	427,426,000	401,464,504
Currency certificates (1872).....	1,680,000	12,350,000
Treasury notes (1890).....	61,297,000	88,320,280
Redemption national bank notes.....	14,149,392	9,355,496
Public disbursing officers.....	57,174,812	64,861,001
Outstanding checks and drafts.....	5,781,008	3,214,684
Post Office Department account.....	7,376,379	
Miscellaneous items.....	2,770,246	
Reserve fund.....	150,000,000	288,595,453
Available cash balance.....	140,107,336	
Total.....	\$1,181,271,552	\$1,048,006,039

The act of March 14, 1900, above referred to, authorizing the exchange of bonds, declares that the gold dollars of present weight and fineness shall

EXPENDITURES.

OBJECTS.	YEAR ENDING JUNE 30,	
	1900.	1899.
Civil.....	\$24,435,364	\$34,692,549
Foreign intercourse.....	3,214,908	22,624,030
Military establishment:		
National defense.....	1,289,547	8,889,292
Pay department.....	31,715,790	69,297,068
Commissary department.....	10,407,632	17,308,288
Quartermaster's department.....	48,047,864	81,591,263
Medical department.....	2,317,255	2,063,067
Ordnance department.....	3,104,632	9,898,410
Armament of fortifications.....	4,867,418	5,265,476
Gun and mortar batteries.....	2,946,047	3,825,642
Improving rivers and harbors.....	18,718,865	16,082,548
Signal service of the army.....	225,583	378,419
Support of national homes.....	2,649,681	3,055,783
Other items.....	8,804,469	12,295,998
Naval establishment:		
National defense.....	1,045,064	6,197,701
Pay, etc., of the navy.....	11,391,941	11,410,984
Marine corps.....	1,798,872	1,890,464
Ordnance.....	3,659,304	4,271,101
Equipment.....	3,329,324	4,682,421
Yards and docks.....	4,476,759	2,440,409
Medicine and surgery.....	290,799	340,442
Supplies and accounts.....	3,518,421	5,708,606
Construction and repair.....	5,781,246	7,371,270
Steam engineering.....	2,581,560	3,445,043
Increase of the navy.....	14,396,255	10,277,218
General account of advances.....	1,396,140	118,625
Vessels for auxiliary naval forces.....		373,585
Other items.....	2,337,502	5,469,913
Miscellaneous:		
Public printing and binding.....	4,596,211	3,926,784
Assessing and collecting internal revenue.....	4,230,135	4,227,461
Mint establishment.....	1,255,916	1,225,224
Collecting customs revenue.....	7,545,515	7,431,659
Revenue-cutter service.....	1,229,388	1,040,595
Life-saving service.....	1,579,128	1,528,686
Marine hospital establishment.....	982,496	788,043
Lighthouse establishment.....	3,556,841	3,118,633
Engraving and printing.....	1,907,170	1,612,926
Customhouses, post offices, etc.....	6,246,658	3,861,194
Pay of custodians and janitors.....	976,988	939,921
Fuel, light, and water—public buildings.....	874,811	851,295
Furniture and apparatus—public buildings.....	896,348	442,193
District of Columbia.....	7,108,522	6,739,039
Deficiency in postal revenues.....	7,820,779	8,211,570
Department of Agriculture.....	2,636,074	2,454,314
Weather Bureau.....	969,776	1,039,060
Indians.....	10,175,107	12,805,711
Pensions.....	140,877,316	139,294,929
Interest on public debt.....	40,160,333	39,896,925
Postal service.....	102,354,579	95,031,384
Other items.....	24,750,568	22,535,672
Total ordinary expenditures.....	\$590,068,371	\$700,098,564
Premiums.....	33,147,055	
Redemption of public debt.....	365,582,271	341,149,969
Gross expenditures.....	\$988,797,697	\$1,041,248,533

be standard of value, and that all forms of money issued or coined by the United States shall be maintained at a parity of value with this standard, and imposes upon the Secretary of the Treasury the duty of maintaining such parity. To that end the act authorizes redemption in gold of the United States notes (greenbacks) and the Treasury notes issued under the act of July 14, 1890, when presented for that purpose, and to secure such redemption authorizes \$150,000,000 of gold in the Treasury to be set apart as a reserve to meet such redemptions and to be used for no other purpose; and when notes are redeemed from the fund, the Secretary of the Treasury is required to restore the reserve, first, by exchanging the notes for gold in the general Treasury; second, by exchanging the notes for gold deposits; and, third, by purchasing gold therewith. If these measures fail, 3-per-cent. bonds may be issued for gold as necessary to maintain the fund. The notes so redeemed may be paid out as above stated for gold, also for purchase of bonds, or for any

other lawful purpose except to meet deficiencies in the current revenues. Up to Oct. 1 the total redemptions in gold from the new reserve fund were \$22,530,854 in United States notes and \$3,594,708 in Treasury notes, for which the fund has been reimbursed from the general Treasury.

The following table shows the amount of money in circulation Jan. 1, 1901, and the same date 1900:

CHARACTER OF MONEY.	AMOUNT IN CIRCULATION JAN. 1,	
	1901.	1900.
Gold coin (including bullion in Treasury).....	\$629,192,578	\$617,977,880
Gold certificates.....	232,787,929	181,122,797
Standard silver dollars.....	76,182,220	70,430,047
Silver certificates.....	422,390,403	886,040,816
Subsidiary silver.....	83,123,463	76,651,821
Treasury notes of 1890.....	61,230,159	86,994,351
United States notes.....	334,587,495	318,269,365
Currency certificates, act of June 8, 1872.....	1,560,000	11,980,000
National bank notes.....	382,186,526	242,001,643
Total.....	\$2,178,251,870	\$1,980,398,170

It will be noticed there is a great increase in the issue of gold and silver certificates and national bank notes, and a decrease in that of Treasury notes of 1890, these latter notes being gradually replaced by silver certificates issued upon the silver dollars coined from the bullion purchased under the act of 1890, as authorized by law. The substitution of the certificates for the notes diminishes to its extent the possible demands upon the \$150,000,000 gold reserve fund. The increased issue of national bank notes is due to the more favorable terms given by the act of March 14, 1900, to banks taking out circulation.

The coinage executed at the several mints in 1900 and 1899 is shown by the following table. The silver dollars were coined from the silver purchased under the act of 1890, for which Treasury notes were issued.

CHARACTER.	VALUE.	
	1900.	1899.
Gold—		
Double eagles.....	\$78,492,700	\$75,860,860
Eagles.....	21,779,340	12,768,920
Half eagles.....	7,529,055	19,487,110
Quarter eagles.....	136,015	60,290
Total gold.....	\$107,937,110	\$108,177,180
Silver—		
Standard silver dollars.....	\$18,244,964	\$18,254,709
Lafayette souvenir dollars.....	50,000	
Half dollars.....	5,344,868	3,216,630
Quarter dollars.....	4,815,892	3,907,177
Dimes.....	2,716,099	2,343,070
Total silver.....	\$31,171,833	\$27,721,586
Minor—		
Five-cent nickel.....	\$1,537,499	\$576,987
One-cent bronze.....	705,518	379,323
Total minor.....	\$2,243,017	\$956,310
Grand total.....	\$141,351,960	\$136,855,076

UNIVERSALISTS. The Board of Trustees of the Universalist General Convention, following the by-laws of that body, published a report and financial statement on Oct. 1. This report contained returns from 1,003 parishes, in which were included 47,886 families, 53,070 church members, 59,034 members of Sunday schools, and which possessed parish property valued at \$9,735,294 less debt, and had raised \$1,244,493 of contributions, including those for parish expenses. The number

of church members had increased 893 during the year. These statistics relate only to the organized parishes in the Universalist fellowship, and necessarily take no account of families residing in territory where there are no such parishes, or of the great number of Universalists who in their neighborhoods attend other churches. A comparison with the statistics of fifteen years ago showed that during the interval the number of families had increased more than 30 per cent., the church membership more than 60 per cent., the parish property nearly 42 per cent., and the current expenditure nearly 44 per cent. The aggregate sum of \$21,324 had been received during the year from legacies and special gifts, and the total amount of the gifts of the year to the General and State Conventions and other bodies for missionary and other benevolent work had been \$77,740. The aggregate amount of the sums applied during the year for missionary and other church work was \$32,176. The permanent funds of the General and State Conventions and other missionary bodies amounted to \$800,696, showing an increase for the year of \$17,141. A special plea was made in the report in behalf of the mission in Japan, where much had been attempted and accomplished, and a great enlargement of missionary possibilities since the beginning of the work could be perceived. A foothold had been obtained, schools and churches established, tracts and books distributed, and "a goodly number of earnest and intelligent Japanese" drawn to the Universalist faith and Church. The organization of a canvass for a twentieth century fund having been directed by the General Convention, the Rev. Dr. Perin was commissioned to devote his whole time from Nov. 1, 1900, to this work, in addition to his duties as financial secretary. Pledges were to become payable when they amounted in all to \$100,000. The income only of the money contributed is to be used for the work of the General Convention.

URUGUAY, a republic in South America. The legislative power resides in the Congress, consisting of a Senate and a House of Representatives, sitting for five months annually and delegating the legislative authority and the control of the administration during the other months of the year to a standing committee of 2 Senators and 5 Representatives. The Representatives, 69 in number, are elected for three years in the ratio of 1 to 3,000 inhabitants by all adult male citizens who can read and write. The Senators, 19 in number, are elected in the departments that they represent by electoral colleges. The presidential term is four years. Juan Luis Cuestas was elected President for the term beginning March 1, 1899, and Rottle y Ordoñez Vice-President. The Cabinet at the beginning of 1900 was composed as follows: Minister of War and Marine, Gen. Callorda; Minister of the Interior and Justice, Saturnino Camp; Minister of Agriculture, Industry, Public Instruction, and Public Works, C. M. Peña; Minister of Finances, Dr. Campeste-guy; Minister of Foreign Affairs and Worship, Herrero y Espinosa.

Area and Population.—The area of Uruguay is 72,110 square miles. The population of the departments as determined by the census of March 1, 1900, is as follows: Artigas, 23,334; Canelones, 76,984; Cerro Largo, 33,039; Durazno, 33,733; Flores, 44,431; Florida, 39,985; La Colonia, 45,185; Maldonado, 24,048; Minas, 32,595; Montevideo, 253,306 (estimated); Paysandu, 38,543; Rio Negro, 18,574; Rivera, 22,509; Rocha, 26,727; Salto, 40,589; San José, 37,279; Soriano, 34,628; Tacuarembó, 34,424; Trienta y Tres, 22,757. The total population of the republic was

882,670. The census was imperfect, and 8 per cent. is added for omissions in the official estimate of population, making the total 900,619. The total population of the interior, without the 8 per cent. added to correct the census figures, was 599,364, comprising 308,670 males and 290,694 females. Of the males 250,524 are native-born, including children of foreigners, and of the females 258,641, while 58,146 males and 32,052 females are of foreign birth. About 15 per cent. of the population of the interior consists of foreign settlers, and in Montevideo 45 per cent. of the people are foreigners. The number of immigrants in 1898 was 9,467, and of departures 6,411. The Spanish and French immigrants are mostly Basques. There were 90,199 foreign-born residents of the interior in 1900, including 23,352 Spaniards, 24,349 Italians, 24,720 Brazilians, 9,140 Argentinians, 4,186 French, 675 English, 708 Germans, 994 Swiss, and 2,078 others. Among the immigrants in 1898 were 2,894 Italians, 3,339 Spaniards, 814 French, 673 Brazilians, 342 English, and 339 Germans. The number of marriages in 1898 was 4,318; of births, 29,870; of deaths, 13,255; excess of births, 16,615; number of marriages in 1899, 4,463; of births, 31,613; of deaths, 12,343; excess of births, 19,270. Education is compulsory in Uruguay, and there were 535 elementary schools in 1897, with 1,043 teachers and 45,614 pupils, the annual expense to the Government being \$677,000.

Finances.—The revenue in 1898 was \$15,200,000, and in 1899 it was \$15,750,000. For 1900 the estimate of revenue was \$15,977,992, of which customs produce \$10,480,000; the property tax, \$1840,845; trade licenses, \$890,325; industrial tax, \$475,297; tobacco tax, \$444,468; educational receipts, \$443,503; stamps, \$352,334; posts and telegraphs, \$310,000; bank profits, \$270,000; other sources, \$471,220. The expenditure was estimated at \$15,969,698, of which \$370,426 was for the Congress, \$665,827 for the presidency, \$120,806 for the Ministry of Foreign Affairs, \$2,230,995 for the Ministry of the Interior, \$959,424 for the Ministry of Finance, \$1,034,259 for the Ministry of Public Works, \$1,725,503 for the Ministry of War and Marine, \$342,249 for the judiciary, and \$9,120,209 for the public debt. The expenses of the public debt in 1899 were \$4,984,332 for interest and \$895,118 for amortization; total, \$5,879,450. The amount of outstanding obligations on Jan. 1, 1899, was \$124,425,395, the external loans amounting to \$100,325,072; international debt, \$4,113,476; internal debts, \$19,986,847. On Jan. 1, 1900, the total obligations amounted to \$127,159,529, an increase during the year of \$2,734,134. A new internal loan of \$4,000,000 was emitted, and \$1,265,866 of external and internal obligations were redeemed. The total amount of new debt created since the advent of President Cuestas was \$9,128,566, mainly in liquidation of the deficit and obligations inherited from the previous Government due to the civil war. Under Julio Herrera the debt increased from \$81,279,752 to \$103,584,039, a difference of \$22,304,287, which includes, however, the consolidation of the external debt by which a saving of interest was obtained. Under Idiarte Borda the increase was \$17,181,058, making the total at the accession of President Cuestas \$120,765,097. Under Juan L. Cuestas the net increase to the end of 1899 was \$6,394,432. The annual service of the public debt in 1899 was \$4,984,332 for interest, \$895,117 for amortization, and \$789,144 for railroad guarantees, making, with commissions and expenses, \$6,664,287. The state of the debt on Jan. 1, 1900, was \$23,101,898 of internal, \$100,161,606 of foreign,

and \$3,896,025 of international debt. The debt has grown up since 1800, when \$2,726,888 were emitted, and in 1865 it amounted to \$11,042,240. In 1870 to \$17,818,694, in 1875 to \$42,357,495, in 1880 to \$49,607,186, in 1885 to \$59,774,428, in 1890 to \$100,606,153, and in 1895 to \$106,606,153. The amount of the debt has grown much faster than population or commerce, and is to a great degree nominal, the market value being far below the face value of the bonds, amounting to not more than \$75,000,000 for the whole debt in 1900.

The silver money put into circulation between 1877 and 1897 was \$4,045,857. The Bank of the Republic, founded in 1896, with \$10,000,000 of capital paid in and a share capital of \$12,000,000 originally, increased in 1899 to \$1,700,000, has the exclusive right to issue bank notes in the future, and may issue them up to half the amount of subscribed capital. The circulation on Nov. 1, 1899, was \$4,465,250, and the cash in the bank amounted to \$3,805,000. The legal standard is gold, but there is no national gold coinage, though the coinage of doubloons has been authorized since 1862. The bank has the option of redeeming its notes in either gold or silver.

On July 13, 1900, an additional excise duty was imposed on sugar and increased import duties were put upon sugar, alcohol, wines, and spirits. The excessive import duties discourage the import trade and prevent the expansion of foreign commerce. The yield of the customs duties in the year ending June 30, 1900, was \$10,054,360, showing an increase of little over 3 per cent. as compared with 1899, far less than the increase of production and of population.

The Army and Navy.—The standing army consists of 231 officers and 3,273 men, organized in 4 battalions, 3 cavalry regiments, 1 regiment of light artillery, and 1 battalion of fortress artillery. The Mauser rifle is furnished to the infantry. The artillery has Krupp, Canet, Bange, Armstrong, and Nordenfeli guns. There is an armed constabulary of 3,200 men independent of the army, and about 20,000 men are enrolled in the National Guard. The naval force consists of 3 gunboats and 1 armed steamer, manned by 184 officers and men.

Commerce and Production.—The rearing of animals is the main industry of the country. There were 4,958,772 cattle, 358,067 horses, 13,144 mules, and 14,447,714 sheep in 1897. The number of cattle slaughtered in 1898 was 665,300, and in 1899 it was 821,600. The wool product in 1899 was 44,000 tons. The wheat crop in 1897 was estimated at 300,000 tons. The area of vineyards in 1898 was 3,160 hectares, producing 3,351,296 hectolitres of wine and 33,516 litres of brandy. Corn and other crops are also grown by the new settlers, who are rapidly extending the agricultural area. They plant tobacco also and have set out olive plantations. The production of gold in the department of Rivera was 87,336 grammes in 1897. The imports of merchandise in 1897 were valued at \$19,512,216, and of coin at \$3,035,679; exports of merchandise at \$29,319,573, and of coin at \$3,110,877. The value of merchandise imports in 1898 was \$24,784,360, and of exports \$30,276,916. Of the imports \$7,014,335 were articles of food and drink, \$2,238,900 tobacco, \$4,992,444 textiles, \$1,360,909 clothing, \$6,410,694 raw materials and machinery, and \$4,793,585 articles of other classes. Of the exports \$336,925 were live animals, \$26,243,492 animal products, \$3,315,543 products of agriculture, and \$380,954 other products. The exportation of jerked beef in 1897 was \$4,312,904 in value; of extract of beef, \$1,182,810; of hides and skins, \$6,633,981; of tallow,

\$1,299,130; of wool, \$12,402,802. The bulk of the commerce of 1898 was distributed among foreign countries as follows:

COUNTRIES.	Imports.	Exports.
Great Britain	\$6,702,793	\$2,894,328
Argentine Republic	3,283,714	5,318,270
France	2,637,749	5,516,988
Brazil	1,872,571	5,855,368
Belgium	1,372,065	5,399,281
Germany	2,311,630	2,810,333
United States	1,982,467	944,039
Italy	2,279,784	577,062
Spain	1,977,400	296,232

The total value of merchandise imports in 1899 was about \$24,000,000, and of exports \$37,000,000.

Navigation.—The number of vessels entered at the port of Montevideo in 1897 from over the sea was 1,126, of 1,904,026 tons; cleared, 1,024 vessels, of 1,796,529 tons; entered in the river and coast trade, 2,439 vessels, of 621,406 tons; cleared coastwise, 2,447, of 621,244 tons. The merchant navy consisted in 1898 of 28 steamers, of 7,654 tons, and 72 sailing vessels, of 21,251 tons.

Railroads, Posts, and Telegraphs.—The length of railroads on Jan. 1, 1899, was 1,008 miles, and there were 89 miles of tramways. The Government has guaranteed $3\frac{1}{2}$ per cent. interest on £5,750,418, the capital cost of 882 miles of railroad, the total capitalization of the entire network being £11,150,857 sterling.

There are 4,380 miles of telegraph lines, including 982 miles belonging to the railroads. The number of dispatches in 1898 was 346,359.

The postal traffic for 1898 was 8,872,575 internal letters, newspapers, etc., and 6,970,238 in the international service; receipts, 1,786,186 francs; expenses, 1,944,425 francs.

UTAH, a Western State, admitted to the Union Jan. 4, 1896; area, 84,970 square miles. The population in 1890 was 207,905. In 1900 it was 276,749. Capital, Salt Lake City.

Government.—The State officers during the year were as follow: Governor, Heber M. Wells, Republican; Secretary of State, James T. Hammond; Treasurer, James Chipman; Auditor, Morgan Richards, Jr.; Attorney-General, A. C. Bishop; Adjutant General, Charles S. Burton; Superintendent of Public Instruction, John R. Park; Coal Mine Inspector, Gomer Thomas; State Engineer, Robert C. Gemmell; Board of Equalization, Robert C. Lund, John J. Thomas, J. E. Booth, and Thomas D. Dee; Board of Labor, John Nicholson, J. S. Daveler; Board of Agriculture, J. A. Wright, Secretary; State Art Institute, created in 1899, H. L. A. Culmer, President.

Finances.—On May 31 the State Loan Commissioners offered the State's new issue of bonds. Sealed bids were also solicited for the sale of the State's lawful money issue of \$300,000 twenty-year 3-per-cent. bonds, to refund the old series of 5-per-cent. bonds sold in 1890. The commissioners finally made the rate $3\frac{1}{2}$ per cent., and sold the whole at par, the buyers to bear all the expense of calling in the old series and engraving and floating the new issue. The money saved to the State by reason of this rate of interest during the period of the next ten years, which would be the remainder of the old bonds, will be \$52,500. The Treasurer's report for December, 1900, showed these receipts: Tax collections and land sales, \$588,672.85; balance on hand, Dec. 1, \$202,208.02; total, \$790,880.87. The disbursements were: Repayment of temporary loan, \$175,000; general fund warrants redeemed, \$51,677.94; investments of land funds, \$11,233.03; total disbursements, \$237,910.97; balance on hand, Dec. 31, \$552,969.90;

total, \$790,880.87. The balance on hand was apportioned to the several funds, as follows: District school fund, \$279,456.89; general fund, \$211,472; university land fund, \$37,193.06; school fund investment, \$10,230.51; sundry land funds, \$14,617.44; total, \$552,969.90.

Valuation.—In 1899 the total valuation by the State Board of Equalization was \$99,713,499. In 1900 it was \$105,629,041. There is a gain of \$1,200,000 in the value of real estate, \$1,400,000 in improvements, \$1,500,000 in personal property, and \$1,900,000 in corporation property.

The value of horses and mules in Utah in 1899 was placed at \$1,275,708; in 1900 the valuation of the same class of property was \$1,414,693. In 1899 there were 183,015 cattle in the State; in 1900 192,210 were assessed, and their valuation was given as \$3,199,789. There was a falling off in sheep, but the statement is made that the figures given do not cover all the sheep owned in Utah, and that fully 1,800,000 sheep that graze in Idaho, Colorado, Wyoming, and Montana are owned by Utah men, although they are assessed in the States in which they range. An explanation of this will be seen in the fact that although the assessment for 1899 was for 1,621,733 sheep and in 1900 for only 1,566,101, the valuation this year is more than \$600,000 above that of last year.

The sheep were never in better condition, the pasturage has been fine, and the sheepmen are well organized.

Only 15,848 swine were owned in the State in 1900, against 15,961 in 1899. The valuation for 1900 was \$45,656.

Summing up all live stock within the State, there is a gain of more than \$1,250,000 for 1900, according to figures furnished by Secretary Thomas, of the State Board of Equalization. These figures show that the total valuation of live stock in the State is \$8,600,090.

Banks.—The banks throughout the State make an encouraging report; most of them show a material increase in deposits, loans, and discounts. Up to Nov. 30 the failures numbered 40, the actual assets being \$95,965 and the liabilities \$192,862. In 1899 there were 59 failures, the total assets of which were \$147,550, while the liabilities were \$359,629. The total bank clearings for 1900 were \$106,734,563.

Precious Metals.—Utah has ranked as the sixth in gold-producing and the third in silver-producing States of the Union, but in 1900 she leaped beyond all former records in the production of her 4 chief metals—gold, silver, copper, and lead. Her silver output in 1899 was rated at \$9,696,969, and her gold output at \$3,369,509. In 1900 the output of gold increased \$600,000, and that of silver \$1,600,000. The copper advanced from \$1,246,000 in 1899 to \$2,514,597 in 1900. This shows the silver gain about 25 per cent. and gold 15 per cent., while lead has made a gain of about 13 per cent. The whole output of the mines is about one third of the total productive wealth of the State.

State Lands.—The new purchasers of State lands number 3,810. Some of these paid in full, but the great majority availed themselves of the opportunity of paying a tenth of the purchase price yearly. Since statehood the State land sales have aggregated 497,090.14 acres, representing a total sale price of \$1,061,541.06. In 1900, 284,248 acres were sold, the total sale price being \$399,974.91. This shows that the business of the State Land Board for the year was nearly 60 per cent. as much as for the whole period since the State became possessed of lands to sell.

Leases of mountain lands for sheep grazing were made for 106,531 acres, appraised at \$152,226, upon which the annual rental is \$6,300.44.

All the revenues for sales and leases of State lands are held in the State treasury in separate funds, and whenever opportunity offers investments are made in Government, municipal, county, and school-district bonds, and in mortgages on farms. Only the earnings of these investments are available for the educational institutions of the State, made beneficiaries by the State's enabling act. In the cases of land revenues going to the establishment of institutions and other public undertakings, the interest is added to the principal, and this will continue until each particular fund is large enough to begin building. The State has the following amounts now out (exclusive of small uninvested balances in the treasury) drawing interest for the funds mentioned: District school, \$164,168; university land, \$150,835; reservoir land, \$19,856; Insane Asylum, \$3,815; School of Mines, \$5,091; Agricultural College, \$5,820; Institution for the Blind, \$2,260; State Capitol, \$3,050; Miners' Hospital, \$2,800; Normal School, \$100; Deaf and Dumb School, \$3,095; Reform School, \$6,364; total, \$367,854.

Education.—According to the report of the State Superintendent, at the close of the school term, July 1, there was a school population of 86,353. This includes all between the ages of six and eighteen, and shows a net increase of 1,934 over the preceding year. There are 43,119 white boys and 43,030 white girls, and 106 colored boys and 98 colored girls. Boys to the number of 38,156, and 38,384 girls, can read and write. Attending the public schools were 36,568 boys and 36,457 girls; attending private schools, 1,139 boys and 1,294 girls; attending no school, 5,518 boys and 5,377 girls. Fifty-three deaf and 8 blind persons between the ages of five and thirty years are noted in the report.

In the year ending June 30, \$1,232,499.03 was expended for the maintenance of public schools. The revenues amounted to \$1,301,610.54, including a balance on hand at the beginning of the year of \$117,297.25. The unexpended balance at the close of the year was \$69,111.51.

The school revenues were from the following sources: District taxes, \$628,194.45; State taxes, \$226,701.53; county taxes, \$119,155.59; sale of bonds, \$47,856.16; sinking funds, \$16,853.12; tuition fees, \$1,202.47; sundry other sources, \$44,345.96. The expenditures were: Salaries of male teachers, \$239,303.63; female teachers, \$346,841.49; new buildings and land, \$152,327.87; interest on bonds, \$57,052.64; current expenses, exclusive of salaries or janitor service, \$50,674.88; repairs and improvements, \$44,442.33; janitor service, \$43,972.93; sinking fund investments, \$30,462.42; redemption of bonds, \$25,862.70; compensation to trustees, \$24,456.35; furniture and apparatus, \$26,610.54; supplies, \$15,292.52; rent of buildings, \$8,978.92; text-books for indigent pupils, \$7,247.58; taking school census, \$2,685.47; books for school libraries, \$1,886.42; disbursements for purposes not otherwise stated, \$38,348.94.

The total bonded debt of school districts is \$1,089,410, and the floating indebtedness \$85,374.92. The net increase of indebtedness in 1900 was \$16,089.84.

The State Teachers' Association held its convention in Salt Lake City the last week in December, adopted a new constitution and by-laws, and elected officers. Frank B. Cooper, Superintendent of the Board of Education, was elected president, and Frank Evans, of Ogden, was re-elected secretary.

Prof. J. H. Paul urged the need of securing suitable text-books on botany, geology, and meteorology for use in the schools of Utah, Montana, Colorado, and other Western States. Other discussions were on the need of art in public education and Nature study in schools.

Coal.—It is estimated that coal worth \$3,200,000 was produced in 1900, and more than \$1,000,000 expended in miners' wages; and this leaves out of account the cost of improvements at the mines.

At Scofield, May 1, about 200 men and boys met their deaths by a mine explosion. Investigation seemed to prove that this resulted from a surplus of coal dust, the needful sprinkling of which had been neglected. After a full inquiry the company was exonerated. Financial aid came promptly, not only from the company, but from people all over the State, and even from outside. Within a few days more than \$100,000 was raised, and the fund increased to goodly proportions. Much of what was known as "the Winter Quarters" of the Pleasant Valley mining region was swept away. The improvements made in the winter quarters during the year aggregates \$37,000. This includes the building of new houses and new facilities for handling coal. At Clear Creek, another point of the Pleasant Valley Company's works, the recent improvements have cost \$46,000; at Castlegate \$79,000 was expended.

It is estimated that this company alone controls 10,000 square miles of coal land, some of which has not yet been touched, and much more only "scratched." The average wages is \$2.50 a day. This company mined more than 1,000,000 tons of coal; its pay rolls aggregated \$660,000, and 1,059 men were employed through the year.

The following statistics were given by Gomer Thomas, State Inspector of Mines: The number of men employed in Utah coal mines in 1900 was 1,504, a gain over the previous year of 381; the tonnage of coal for 1900 was 1,224,176, a gain of 348,304 tons. The number of accidents during the year was 272; fatal, 209. Twelve mines were opened in Carbon County, 15 in Emery County. No mines were suspended or abandoned during the year.

Fish and Game.—The past season is the first that the hatchery has been in full operation, and, despite some unforeseen drawbacks, the result is most encouraging.

The hatchery was located about 1½ mile east of Murray, on 5½ acres of land along Spring run. The cost of land, building, drive well for water that maintains an even temperature all the year round, equipment, etc., approximates to \$4,600, and the needs of the hatchery for the next two years are placed at \$3,860, exclusive of \$1,500 for a dwelling for the superintendent. It was formally opened on Dec. 30, 1899. In the season 1900-'01 190,000 trout eggs of various kinds were received, which were hatched and planted in the waters of Utah, the loss being a little less than 4 per cent.

Commissioner Sharp suggests that the hatchery can easily be made to rear from 2,000,000 to 3,000,000 young trout every year if advantage is taken of the varying spawning periods. During this first year there were received at the hatchery 500,000 Eastern lake trout eggs, 350,000 Eastern brook trout eggs, 5,000 landlocked salmon from Green lake, Maine, 25,000 native or black-spotted trout eggs from Big Cottonwood creek, 75,000 grayling trout eggs from Montana, and 10,000 steelheads from Oregon. The distribution was made with reference to the nearness of streams to railroads and other conditions favorable to propagation.

The report says that in the two years just closed a total of 1,010,574 pounds of fish have been caught in the public waters and sold in local markets, representing a value of \$68,391, and these figures do not take in the catch made for private consumption.

Incomplete reports show that during the year 66,392 wild ducks were killed and sold, and that 724 grouse were marketed. These, together with 12,760 pounds of venison, represent a value of \$12,433.

Owing to the avariciousness of market hunters, large game animals once abundant, such as the elk, antelope, and mountain sheep, are fast becoming extinct, and the same is true of sage hens, pine hens, and various kinds of native grouse.

Industries.—There has been ample proof that flour milling might become one of the most prosperous of Utah industries could an outside market be found for the surplus. There are 75 flour mills in the State, with a capacity for turning out at least 2,000,000 barrels of flour in a year, and this would mean the consumption of 9,000,000 bushels of wheat, almost twice the yield of the State for this year. The mills stand idle a good portion of the time, while the wheat is shipped out unground or consumed at home as stock feed. Good judges place the wheat crop for 1900 at nearly 4,000,000 bushels.

Fifty-seven creameries are working in the State, 5 having been added during the year. The capital was estimated at \$200,000. Considerable new capital has been added within the year, and the output, including butter, cheese, and skim milk, amounted to about \$900,000. Considerable business is still done in the old line of dairy work.

The beet-sugar industry produced nearly \$1,000,000 in income during the year. Hitherto the great sugar works at Lehigh absorbed most of the beet product, a great system of piping having been laid for the drawing of beet juice from outlying sections. New factories have started up, and every inducement is offered to farmers for the raising of beets. Even the pulp, which the factories resell to the farmers, has proved valuable as a fattener of cattle.

The industry has been stimulated too by the prices offered by the Colorado Sugar Manufacturing Company for next year's crop of Utah beets. Manager McFarland has announced the following schedule: Twelve per cent. purity, \$4.25; 13 per cent. purity, \$4.58; 14 per cent. purity, \$4.91; 15 per cent. purity, \$5.25; 16 per cent. purity, \$5.58; 17 per cent. purity, \$5.91; 18 per cent. purity, \$6.25; 19 per cent. purity, \$6.58; 20 per cent. purity, \$6.91; 21 per cent. purity, \$7.58.

In the last two years sugar-beet raising has increased enormously. Cache County alone yielded 6,500 tons of beets in 1900, produced on about 500 acres. The beets bring \$3.50 a ton delivered on the cars.

An offer from the Ogden Sugar Company has also raised the price of beets at home. A year ago it paid \$4.25 a ton; this year it offers \$4.50 for beets containing 12 or more per cent. of saccharine matter.

The tomato crop was unusually heavy, and the canning factories were unable to cope with it. Hence many farmers complain that contracts were broken, and threaten damage suits. The factory people say that some of the tomatoes were damaged by frost. There is a call for more canning factories. The figures for this year show 225,000 cases.

For a Library.—John Q. Packard has given a tract of land worth \$20,000 to found a free library in Salt Lake City, and \$75,000 to build with.

Mothers' Congress.—The Mothers' Congress held its third annual meeting in Salt Lake City in April. Its discussions were full and interesting, and the attendance at the meetings large. Kindergarten work was treated from every point of view. The duty of mothers in the matter of the spiritual training of the young, prenatal influences, heredity, environment, and the relations of the family, especially those of parents and children, were treated exhaustively. The evening sessions were especially large and spirited.

Art Institute.—The Utah Art Institute in its report says that the 31 lectures under the institute's direction for the purpose of awakening interest in art have been productive of much good. Many pictures were given to the institute. The revenues were \$3,409.40, and the expenditures were within this sum.

Monument.—Utah's monument to pioneers, surmounted by a statue of Brigham Young, was unveiled by his great-granddaughter on July 25. Near the base is a figure group representing an Indian, a trapper, and a pioneer. The sculptor is C. E. Dallin.

Mormons.—Reports from returned missionaries seem to show that the gaining of converts to Mormonism is a harder task in France and Germany than in England even, and is easiest in Scandinavia. The latter folk held a jubilee in Salt Lake City to celebrate the fiftieth anniversary of the advent of Mormonism into Denmark, Sweden, and Norway.

The ninety-fifth birthday anniversary of Joseph Smith, founder of Mormonism, occurred on Dec. 23, and was celebrated in the new Sixteenth Meetinghouse, dedicated the same day, and built on the corner of Fifth West and North Temple Streets, Salt Lake City, on the site of a log hut put up in 1849 which served for both church and school. The new building was packed with people, and among the old settlers was the aged widow of the prophet.

Irrigation.—About the middle of December the Utah Light and Power Company disclosed an arrangement for constructing four great reservoirs in the Ogden cañon, which will furnish 10,000 horse power, irrigate 75,000 acres of arid land, and supply Ogden with water. The water thus stored would enable the power company to operate its power plant the entire season up to its full capacity (10,000 horse power) while irrigating lands in the western and northwestern parts of the county and adjoining portions of Box Elder County. It would also give a water supply for a city system greater than the one that now supplies Ogden.

Unoccupied Land.—It has often been said that the most desirable lands of Utah have been settled for years, yet each year shows great tracts of fertile land reclaimed by irrigation. The State offers an inducement of ten years' time for paying for land, and because of this many intending settlers on Government tracts relinquish their holdings to the State, have the Land Board select the holdings to apply upon some of the State grants, and then contract with the State for the purchase of the land on the easiest terms. In this way the State is enabled to do an enormous amount of business in the sale of lands for the benefit of Utah's public institutions.

Through the operation of the enabling act by which Utah was admitted to the Union, four sections in each township, or about 5,760,000 acres, were granted for the maintenance of the public schools, 125,000 acres were ceded for maintaining the university, 500,000 acres were allowed for establishing reservoirs, 200,000 acres for the Agricultural College, 100,000 acres each for to help sup-

port the Insane Asylum, the Deaf and Dumb Asylum, the Institution for the Blind, the Reform School, the State Normal School of Mines, 64,000 acres for a State School of Mines, the same for a State Capitol, and 50,000 acres for a miners' hospital. Out of these munificent grants, 7,300,000 acres in all, less than 500,000 acres have been sold by the State.

State Institutions.—A hospital was added to the Deaf, Dumb, and Blind Institution in 1900. The sum of \$3,500 was appropriated by the Legislature for the current expenses of the hospital. The expenses of the year were \$5,542.03, but the deficiency was paid from funds earned by the institution. A physical laboratory has been added to the school, and the library has been increased.

Three students have been graduated in the past two years, and 13 since the institution was founded. The total attendance in the two years was 123; the present enrollment is 76.

Fifty-seven acres of land belong to the institution, valued at \$15,000, and the buildings at \$100,000.

At a meeting of the board of the Insane Asylum in November, Medical Superintendent Hardy reported as follows: In the asylum Oct. 31, 164 men and 155 women. Requisition was made on the Auditor for the sum of \$3,392.73, to pay the expenses for October.

Political.—In February Gov. Wells issued a call for the special election of a Congressman to fill the seat made vacant by the retirement of Mr. Roberts, and on April 3 W. H. King was elected.

On July 1 Mrs. J. M. Cohen, the first woman delegate to a national convention, was sent by the Democrats of Utah to Kansas City.

On Sept. 6 the Democratic State Convention was held. James H. Moyle was nominated for Governor; Fisher Harris for Secretary of State; Lund for Treasurer; Whitecotton for Judge of the Supreme Court; Weber for Attorney-General; Porter for Superintendent of Public Instruction; Hayes for Auditor.

The Republicans nominated, for Governor, Heber M. Wells; Secretary of State, J. T. Hammond; Justice of the Supreme Court, George W. Barch; Attorney-General, M. A. Breeden; Superintendent of Public Instruction, A. C. Nelson; Treasurer, John De Grey Dixon; Auditor, T. S. Tingley. This ticket was elected. The plurality was: Wells, 3,153; Hammond, 2,467; Barch, 2,971; Breeden, 1,337; Nelson, 1,551; Dixon, 2,208; and Tingley, 1,738. In the presidential election the Republican electors received 47,139 votes, the Democratic 45,006.

The vote for presidential electors gave the Republican candidates 47,139, and the Democratic 45,006.

V

VENEZUELA, a federal republic in South America. The legislative power is vested in the Congress, consisting of a Senate of 27 members, 3 from each State, and a House of Representatives numbering 63 members, 1 to 35,000 inhabitants, who are elected for four years by the votes of all adult male citizens. The Congress elects for two years a Council of Government, and for the same term the Council elects the President of the republic. Gen. Ignacio Andrade, who was elected for the term beginning March 4, 1898, was deposed by a revolution and Gen. Cipriano Castro was invested by Congress with supreme power as provisional President on Oct. 21, 1899. The Cabinet, appointed on Oct. 23, 1899, was composed as follows: Minister of the Interior, Francisco Castillo; Minister of Foreign Affairs, Anduego Palacio; Minister of Finance, Tello Mendoza; Minister of War, Gen. Ignacio Pulido; Minister of Agriculture, Industry, and Commerce, Manuel Hernandez; Minister of Public Works, Victor Rodriguez; Minister of Public Instruction, Clemente Urbaneja.

Area and Population.—Venezuela has an area of 593,943 square miles. The population in 1894 consisted of 1,197,069 males and 1,247,747 females; total, 2,444,816. The number of foreigners was 44,129, comprising 11,081 Colombians, 518 other South Americans, 232 North Americans, 13,558 Spaniards, 6,154 English, 3,729 Dutch, 3,179 Italians, 2,545 French, 262 Germans, 82 Danes, and 2,089 others. The population was composed of 376,156 persons engaged in agriculture, 135,688 in industry, 8,341 in navigation, 1,052 in mining, 42,816 in commerce, 3,675 functionaries, 528 religious, 6,038 military, 9,311 in the liberal professions, 211,143 domestics, and 1,650,068 nonworkers. The number of marriages in 1894 was 4,612; of births, 80,819; of deaths, 46,410; excess of births, 34,409. The immigration was 141, and for ten years ending with 1894 it was 5,548.

Finances.—The budget for 1900 makes the total revenue 38,877,480 bolivars, or francs, of

which 26,000,000 bolivars come from customs, 2,669,680 bolivars from stamps, 2,593,300 bolivars from internal revenue, 4,722,500 bolivars from transit dues, 2,860,000 bolivars from salt, and 32,000 bolivars from public lands. The expenses were estimated at the same figure, 19,893,456 bolivars being allotted to the public service, 4,967,000 bolivars to the internal debt, 2,135,203 bolivars to the exterior debt, 3,000,000 bolivars to the Venezuelan loan, 887,321 bolivars to foreign creditors, 2,340,000 bolivars to public works, and 5,654,500 bolivars to subsidies.

The public debt on June 30, 1898, amounted to 201,419,202 bolivars. When Venezuela seceded from Colombia in 1830 the share of the debt incurred in the war of independence assumed was £1,888,396, for which, including unpaid interest, new external bonds for £2,750,000 were issued in 1881, and of these £2,638,200 were outstanding in 1898, in addition to which 50,000,000 bolivars of 5-per-cent. bonds were issued in 1896 for the settlement of arrears of railroad guarantees, making the total foreign debt £4,587,900. The internal debt on Jan. 1, 1899, was 79,783,511 bolivars. A law was made in July, 1896, ordaining that the issue of paper money by the Government, and also the coinage of silver and nickel without special enactment by Congress, should cease from that time, as it was intended that gold coins and gold certificates should take the place of silver and uncovered paper. There were 12,000,000 bolivars in paper and 8,000,000 bolivars in silver in circulation, and the silver has since been kept practically on a par with gold. The Bank of Venezuela, with 12,000,000 bolivars capital, obtained in 1897 the right to collect and disburse the revenue for five years, receiving 2 per cent. commission on all collections and payments, and was allowed 8 per cent. interest on advances to the Government, which it agreed to make up to 6,000,000 bolivars. At the same date a charter was granted to the Bolivar Bank, a new bank of issue, with 20,000,000 bolivars capital, which obtained the administration of the

salt deposits, receiving 10 per cent. of the net revenue, and agreed to extend credit to the Government likewise to the extent of 6,000,000 bolivars at 8 per cent. interest, and also to lend 10,000,000 bolivars to cattle breeders and farmers.

The Army and Navy.—The permanent army consists of 3,600 men, distributed in garrisons throughout the country. The militia, in which every man is enrolled between the ages of eighteen and forty-six, numbers about 250,000 men. The fleet consists of 3 unarmored steamers and several small gunboats.

Commerce.—The principal exportable product is coffee, of which 13,808 tons were shipped from the port of La Guayra in 1898, 13,023 tons from Puerto Cabello, 26,495 tons from Maracaibo, and 119 tons from Ciudad Bolivar; of cacao, 5,290 tons from La Guayra, 326 tons from Puerto Cabello, 130 tons from Maracaibo, and 41 tons from Ciudad Bolivar. The export of hides and skins was 3,454 tons; of rubber, 580 tons; of quina bark, 13,094 kilogrammes. Sugar, copaiba, tonga beans, feathers, fustic, divi-divi, and fish sounds are also exported. The export of gold bars was 1,218 kilogrammes. The chief imports are provisions, dry goods, hardware, coal, kerosene, timber, cement, and machinery.

Navigation.—The number of vessels that visited La Guayra in 1898 was 332, of 473,164 tons; Ciudad Bolivar, 129, of 44,088 tons; Puerto Cabello, 152, of 218,788 tons; Maracaibo, 302, of 29,220 tons. The merchant fleet of Venezuela consisted of 11 steamers, of 2,185 tons, and 17 sailing vessels, of 2,760 tons.

Railroads and Telegraphs.—There were 529 miles of railroads in operation in 1899. A contract was concluded in April of that year for the construction of a line from Puerto Cabello to Yaritagua. Contracts were made in 1896 for branch railroads and for steamboat service on the Lake of Valencia.

The length of telegraph lines in operation in 1898 was 3,882 miles.

Political Affairs.—Financial and political internal complications and difficulties kept Venezuela in a state of unrest in 1900 and disturbed commerce. In January the Government had a quarrel with the directors of the Bank of Caracas and the Bank of Venezuela because they refused to advance money, and the officers of these banks and other prominent business men, many of them foreigners, were arrested. The Opposition party made trouble for the Government in several of the states, but in July peace was officially proclaimed and political prisoners were set at liberty. On July 30 a new Cabinet was appointed, as follows: Minister of the Interior, Dr. Rafael Cabrera Malo; Minister of Foreign Affairs, Dr. Eduardo Blanco; Minister of War and Marine, Gen. J. Prilido; Minister of Finance, Tello Mendoza; Minister of Public Works, Juan Otañez; Minister of Public Instruction, Dr. Felix Quintero; Minister of Commerce, Ramon Ayala. A dispute arose later between the Government and an American company regarding the limits of the latter's concession.

VERMONT, a New England State, admitted to the Union March 4, 1791; area, 9,505 square miles. The population, according to each decennial census, was 154,465 in 1800; 217,895 in 1810; 235,966 in 1820; 280,652 in 1830; 281,948 in 1840; 314,120 in 1850; 315,098 in 1860; 350,551 in 1870; 332,286 in 1880; 332,422 in 1890; and 343,641 in 1900. Capital, Montpelier.

Government.—The following were the State officers in 1900: Governor, Edward C. Smith; Lieutenant Governor, Henry C. Bates; Secretary of State, Frederick A. Howland; Treasurer, John

L. Bacon; Auditor, Orion M. Barber; Adjutant General, T. S. Peck, resigned, and succeeded, Oct. 1, by W. H. Gilmore; Railroad Commissioners, Messrs. Foster, Miller, and Watson; Superintendent of Education, Mason S. Stone; Fish and Game Commissioner, John W. Titcomb; Highway Commissioner, W. B. Viall; Inspector of Finance, F. S. Platt; Chief Justice of the Supreme Court, Russell S. Taft; Associate Justices, Loveland Munson, John W. Rowell, John H. Watson, H. R. Start, L. H. Thompson, James M. Tyler; Clerk, M. E. Smilie. All are Republicans.

State officers are elected biennially, in September of the even-numbered years. The Legislature meets biennially in October of the same years. There are 30 Senators and 245 Representatives. The town system of representation is still maintained.

Population.—The population of the State by counties in 1900 was as follows: Addison, 21,912; Bennington, 21,705; Caledonia, 24,381; Chittenden, 39,600; Essex, 8,856; Franklin, 30,198; Grand Isle, 4,462; Lamoille, 12,249; Orange, 19,313; Orleans, 22,024; Rutland, 44,209; Washington, 36,607; Windham, 26,660; Windsor, 32,225. Addison, Essex, Lamoille, Orange, and Orleans lose in numbers. The largest gain is in Washington County, from 29,606 to 36,607, an increase of 7,001, or about 24 per cent. The next in order are Grand Isle, 619, or 16 per cent.; Chittenden, 4,211, or less than 12 per cent.; Rutland, 812, or less than 2 per cent. The State as a whole has made the first appreciable gain that has been made in thirty years.

There are 48 incorporated cities and villages in Vermont, for which the population in 1900 is separately returned. Of these only 13 had a population of more than 2,000 in 1900, and only 2 more than 10,000—namely, Burlington, with 18,640, and Rutland, with 11,499. Those having a population of 2,000 or more are as follows: Barre, 8,448; Bellows Falls, 4,337; Bennington, 5,656; Brattleboro, 5,297; Burlington, 18,640; Fairhaven, 2,470; Montpelier, 6,266; Proctor, 2,013; Rutland, 11,499; St. Albans, 6,239; St. Johnsbury, 5,666; Springfield, 2,040; Winoski, 3,783.

Finances.—The financial condition of the State on June 30, 1900, was as follows: Resources—cash on hand and in banks, \$117,161.20; due from towns, State tax, \$4,412.79; corporation taxes estimated, \$400,000; collateral inheritance tax estimated, \$20,000; total, \$541,573.99. Liabilities—due to towns United States deposit money, \$14,383.26; due to soldiers' unpaid balances, \$8,312.18; due to towns for school and highway taxes, \$171,991.08; Auditor's orders unpaid, \$13,971.54; total, \$208,658.06. This left available for the fiscal year from July 1, 1900, to June 30, 1901, \$332,915.93.

The receipts for the two years ending on that date were: Cash on hand and in banks, June 30, 1898, \$137,431.76; tax, collateral inheritance, \$39,988.89; tax, corporation, \$841,633.47; tax, State, \$355,972.50; from all other sources, \$255,675.59; total, \$1,630,702.21. The disbursements were: Paid soldiers, State and allotted pay, \$32,438.55; paid debentures, Legislature, \$57,844.20; paid balance temporary loans, \$145,000; paid interest, \$49,930; paid Auditor's orders, \$1,228,328.26; balance cash on hand and in banks, \$117,161.20; total, \$1,630,702.21.

Besides the amount paid on Auditor's orders as given above, there were orders outstanding and unpaid to the amount of \$13,971.54. So that all the orders drawn for State expenses for the biennial term amount to the sum of \$1,242,299.80.

The Auditor reports that the net amount of

State expenses for which orders were drawn for the biennial term was \$1,008,583.77, of which the following is a summary: Administration of justice, \$328,766.62; agricultural, \$23,525.64; county commissioners, \$1,632.67; Dairymen's Association, \$2,000; educational, \$12,542.88; executive departments, \$49,017.98; fish and game, \$8,770.94; insane, \$259,578.98; legislative expense, \$69,104.23; libraries, \$10,514.07; Maple Sugar Makers' Association, \$1,000; military, \$39,826.60; moiety under liquor law, \$41.25; noxious animals, \$2,957.50; penal, \$82,102.26; pensions, \$480; public health, \$22,431.09; printing, \$18,476.45; Railroad commissioners, \$6,315.13; soldiers' claims under No. 86, 1898, \$11,132.62; Soldiers' Home and deceased veterans, \$25,207.25; special appropriations, 1898, \$19,627.39; special commissions, \$3,532.22; total, \$1,008,583.77.

Adding to this sum what the Treasurer has paid by authority of law, without orders from the Auditor, it appears that the State expenses for the biennial term were nearly \$1,180,000.

Education.—Among the statistics given by the superintendent in August were the following: Total school expenditures, \$1,074,221.88; cost per pupil of total expenditure, \$16.28; current expenses, \$873,397.03; cost per pupil of current expenses, \$13.24; number of children between five and twenty-one years, 90,648; number in attendance, 65,964; number of male teachers, 510; number of female teachers, 3,232; number of Vermont normal school graduates, 632; number of college graduates, 201.

The Insane.—There were 551 patients at the Insane Asylum, Waterbury, at the close of the year, 51 in excess of its normal capacity. The cost per capita each week was \$3.50. Private patients paid \$5.623 during the year. At the Brattleboro Retreat there were 291 inmates, who were cared for at a weekly cost of \$3.75 each. This institution has accommodations for 350.

Railroads.—The seventh biennial report of the Railroad Commissioners covers the term ending July 1. Many and great improvements have been made in the condition of the trunk line railroads during the past two years. New and heavier steel rails have been substituted for old and lighter weight rails; iron bridges of increased carrying capacity have replaced most of the old wooden ones and some of the iron bridges of lesser strength; passenger depots have been rebuilt or repaired; and the roadbeds have been greatly improved by an unusually large amount of ballasting and renewals of ties. The Central Vermont Company has expended more than \$425,000 upon its system since it took possession of the property, May 1, 1899. Large expenditures have also been made for permanent improvements on the lines of the Boston and Maine and the Rutland Railroad in this State. Notwithstanding the large outlay of money by railroad companies to insure safety, expedition, and comfort to passenger traffic, and quick shipments of freight traffic, the average receipts per passenger per mile and the average receipts per ton per mile by the railroad companies of the State have gradually decreased during the past ten years.

The electric railways have 64.91 miles of main line and 9.07 of branches and spurs.

The number of fatal accidents reported is 41; accidents not fatal, 45. Twelve of the 19 companies reporting have paid dividends for the fiscal years 1897-'98 and 1898-'99, and 4 that did not pay a dividend showed a surplus from operation; the others showed deficits.

Highways.—The first annual report of the Commissioner of Highways shows that in 1900 the

total mileage of the highways was 14,825 miles, and 124 miles of permanent roadway was built at a cost of \$101,331.84, and the State paid \$87,257.17 of the cost.

Insurance.—The cost of State supervision of insurance was \$4,261.42 for the year ending June 30, 1900. The National Life Company, of Montpelier, celebrated its semicentennial in July. During the year this company wrote new insurance to the amount of \$1,005,615; and at the end of the year had outstanding insurance to the amount of \$5,311,170.

The Vermont Mutual Fire Insurance Company, in its seventy-third annual report, shows that the company has increased its surplus in the last fiscal year from \$88,967.43 to \$97,624.21. The number of policies issued during the year was 12,549, insuring property to the amount of \$17,080,702; premium notes taken, \$1,308,345; making the whole amount of premium notes in force Aug. 1, 1900, \$4,280,641, and the aggregate amount at risk \$54,341,496. The assessment is 4 per cent., a rate that has been maintained since and including 1897. The outstanding policies number 41,529.

Banks.—The State Inspector of Finance finds that there are 22 savings banks and 19 trust companies. Their united deposits are \$38,000,000, a gain during the year of \$1,763,644. The number of depositors is 118,354, of whom 103,799 are residents of the State, or almost 1 in 3 of the whole population in Vermont. The nonresident depositors number 14,555, with deposits of \$6,421,508. The average credit to each depositor is \$323.52.

The doors of the Merchants' National Bank, Rutland, were closed March 26 in consequence of the defalcation of the cashier, C. W. Mussey, for about \$150,000. The shortages had been adroitly concealed so as to deceive not only the committee of directors which periodically went over the accounts, but 3 bank examiners, all experts, who have examined the bank within a year. The cashier was tried and sentenced to seven years in the House of Correction at Rutland. In his confession he implicated the proprietor of a music store in Rutland, whose trial did not take place before the close of the year.

About April 15 a shortage of \$25,000 was discovered in the funds of the Waterbury National Bank. The missing funds, it was found, had been lost by the teller, J. C. Farrar, in stock speculations. His sentence was six years. The capital of the bank was not impaired.

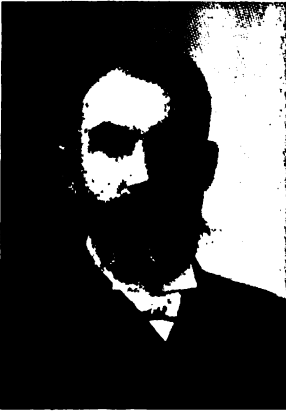
Cattle.—According to the report of the Cattle Commission, 72,893 cattle were tested for tuberculosis during the year, and of that number 2,903 were killed. The total amount paid owners for cattle killed was \$36,902.25.

Legislative Session.—The General Assembly met Oct. 4, and adjourned Nov. 27. Fletcher D. Proctor was Speaker of the House.

An election was held to fill the vacancy caused by the death of United States Senator Morrill. It had been temporarily filled by the appointment of Hon. Jonathan Ross, who was a candidate for election by the Legislature. The other Republican candidates were ex-Gov. William P. Dillingham, Hon. W. W. Grout, and Charles A. Prouty. Seneca Hazleton was the choice of the Democrats. The choice was made on the third ballot; Mr. Prouty had withdrawn; the Democratic members transferred their votes to Mr. Dillingham, and he was elected by a vote of 162 out of 270.

The Constitution permits constitutional amendments to be offered only once in ten years, and this was one of the years. Four were proposed. One of them was to do away with this restriction and allow amendments to be offered at any regular

session, beginning with 1904. This was rejected. Another was to change the time of holding the State election from September to November, and the date of meeting of the General Assembly from October to January; this also was defeated. A third was to divide the State into 30 senatorial districts, according to population, and this failed. The fourth proposed amendment is to authorize the Legislature to provide by law for filling vacancies in the offices of State Senator and Representative. This was passed; but to become effective it must pass the Legislature of 1902 and be adopted at the polls.



WILLIAM W. STICKNEY,
GOVERNOR OF VERMONT.

The important question of the year was that of substituting high license or local option for the prohibitory law. Numerous petitions for each side were sent in and bills were introduced. It was proposed to refer to the vote of the electors the plan of substituting local option for the present law, but this was defeated, and no changes were made. The defeat of the bill is explained by a newspaper favoring the license system in the following paragraph:

"The truth is that the majority of our law-makers were opposed to the license idea, and no amount of burnishing would make it acceptable to them. They looked on license as evil and unwise, and if necessary were willing to stand between it and the possible desires of a majority of voters in favor of it."

The appropriations provided for expenditures amounting to \$1,510,000. The salaries of members amounted to \$47,025. The State tax was fixed at 15 cents, and the State school tax at 10 cents.

A bill amending the charter of the Vermont Central Railway in regard to claims that the road must pay, having the effect to include claims for grain destroyed in the Ogdensburg elevator fire, was vetoed by the Governor, but was passed again by a vote of 163 to 5 in the House and 21 to 5 in the Senate.

A bill to establish a forestry commission to take charge of park lands that may be deeded to the State was amended by authorizing the Governor and the Secretary of State to take charge of such lands.

A proposal to grant municipal suffrage to tax-paying women was lost in the Senate by a narrow margin.

An old statute requiring that any one running a steam vehicle on a public road shall send a messenger a half mile ahead to give warning of its approach, in order to prevent accidents, was repealed.

The preceding Legislature made provision for the appointment of a committee to investigate the matter of double taxation, and its report was presented this year. It showed the negligence or collusion of appraisers in listing property for taxation, and detailed some of the schemes resorted to for evading taxation.

A bill was passed to prevent fraudulent conceal-

ment of property from taxation, and another authorizing the State Commissioner of Taxes to investigate the present system of taxing corporations and report with recommendations to the next Legislature.

The Senate passed a bill to abolish capital punishment, but the House refused it a third reading by a vote of 118 to 107.

Among the measures were the following joint resolutions:

Asking Congress to take some recognition of the distinguished services of Capt. Charles E. Clark of the United States battle ship Oregon during the Spanish-American War.

Providing for a portrait of Capt. Clark for the State.

Providing that the week beginning with the third Sunday in August each year be known as "Old Home Week."

Providing for a portrait of Gen. Emerson H. Liscum to be placed in the State Capitol.

A special committee was appointed on the erection of a memorial tablet marking the birthplace of President Chester A. Arthur.

Other measures were:

Reorganizing the militia and consolidating the offices of quartermaster general and adjutant general.

Prohibiting the selling or giving of cigarettes to minors.

To prevent imitations of dairy products.

Providing for traveling libraries.

To protect gray squirrels.

Allowing women to act as notaries public.

Permitting appointment of women to certain town offices—treasurer, superintendent, librarian.

Giving physicians the right to quarantine infectious diseases.

Establishing a State laboratory.

Providing for geological work.

Appropriating \$13,951 for repairs at Waterbury Asylum and \$4,000 for Brattleboro Retreat.

Removing the words "or mentally" from the act allowing a voter to be assisted if he is physically or mentally unfit to prepare his ballot.

The Legislature elected Hamilton S. Peck Judge-Advocate General and W. H. Gilmore for the combined offices of Adjutant General and Quartermaster General, and the Senate confirmed the Governor's nominations of J. O. Sanford to be State Highway Commissioner and Judson E. Cushman State Tax Commissioner. Dr. W. J. Huntington was made Surgeon General, and Charles J. Bell, Ernest Hitchcock, and George Aitken were made members of the Board of Agriculture.

Political.—The State election took place Sept. 4. Tickets were put out by 4 parties.

The Republicans held two conventions, the first, April 18, in Burlington, to choose delegates to the national convention. They were not instructed for President McKinley, but his administration was approved. In regard to the island possessions the resolutions said: "We unhesitatingly proclaim our conviction that from over no inch of this newly acquired territory, where the Stars and Stripes have floated, carrying their promise of enlightenment and freedom, should that flag be lowered or that promise be withdrawn."

The second Republican convention met in Montpelier June 27, and named the following candidates: For Governor, William W. Stickney; Lieutenant Governor, Martin F. Allen; Treasurer, John L. Bacon; Secretary of State, Fred A. Howland; Auditor of Accounts, Orion M. Barber; Presidential Electors, Truman C. Fletcher, Horace F. Graham, George E. Fisher, Fred G. Fleetwood.

The platform contained no definite declarations on State issues.

The Democratic convention met in Montpelier June 14, elected delegates to the national convention, and made nominations for State officers and presidential electors. The resolutions contained the following declarations:

"We demand a tariff for revenue only, to take the place of the present Dingley tariff; denounce the creation of corporate trusts; demand the urgent enforcement of all antitrust laws; reiterate our faith in the larger benefits to be derived from bimetalism as compared with monometallism; demand the restoration of silver to its original and natural place as a redemption currency, and indorse the principles of the Chicago platform of 1896.

"We favor home rule for the Filipinos under the protection of the United States; we demand absolute free trade between Porto Rico and all parts of the United States; the independence of Cuba; no subject peoples; no colonial dependencies.

"We express our cordial sympathy with the cause of the Boers; we favor an income tax; the election of United States Senators by direct vote of the people; the immediate construction of the Nicaragua Canal under the control and protection of the United States."

The ticket follows: For Governor, John H. Senter; Lieutenant Governor, E. S. Harris; Secretary of State, H. O. Cummings; State Treasurer, Elisha May; Auditor, C. A. Fitzpatrick.

The Prohibition ticket was: For Governor, Henry C. Barnes; Lieutenant Governor, Charles B. Wilson; Treasurer, Lucien C. Kimball; Secretary of State, Fenimore H. Shepard; Auditor, Frederick A. Collins.

The Social Democratic party made the following nominations: For Governor, James Pirie; Lieutenant Governor, C. H. Barber; Secretary of State, John McMillan.

The Republican candidates were elected, the vote standing: Stickney, 48,441; Senter, 17,129; Barnes, 950; Pirie, 567. There are 30 Republicans in the Senate and 196 in the House; 48 Democrats and 1 Independent in the House. The election was affected to some extent by the question that was to come before the Legislature of substituting local option for the prohibition law. There were but 42 Democrats in the preceding Legislature. At the November election the presidential vote was: McKinley, 42,568; Bryan, 12,849; Woolley, 368; Barker, 367; scattering, 64.

VICTORIA, Queen of Great Britain and Empress of India, born in the palace of Kensington, May 24, 1819; died in Osborne House, Isle of Wight, Jan. 22, 1901. Her father was Edward, Duke of Kent, fourth son of George III, and her mother was Princess Victoria Maria Louisa of Saxe-Coburg-Gotha, whose first husband was Prince Charles of Leiningen. At the time of the birth of the Princess Victoria two sons of George III, older than the Duke of Kent, were still living—the Duke of York, then Prince Regent and afterward George IV, and the Duke of Clarence, who became William IV. William had two daughters, both of whom died in infancy, so that Victoria's father, had he lived, would have succeeded to the throne at the death of William IV. The princess was christened Alexandrina Victoria at Kensington Palace, June 24, and in January of the following year the Duke of Kent died.

The princess was educated under the supervision of the Duchess of Kent and Baroness Lehzen, who had gone to England as governess to Princess Feodore of Leiningen, half-sister of Victoria, and who

became private governess to the Princess Victoria when the latter was five years of age. Up to her ninth year all the princess's education was in German, but at ten years of age she was placed under English masters; Rev. George Davys, whom she made Bishop of Peterborough after her accession, taught her Latin; her master in music was Mr. J. B. Sale; in history, Mr. Westall; in penmanship, Mr. Thomas Seward, writing master of Westminster School. When King George IV died, in 1830, and was succeeded by his brother William, Duke of Clarence, whose wife was Princess Adelaide of Saxe-Meiningen, the Princess Victoria was recognized as heir to the throne. During his reign there was great bitterness of feeling between the King and the Duchess of Kent, the chief cause of which was the refusal of the latter to allow her daughter to pass a part of the year at court. In May, 1837, when the Princess Victoria became of age, the King determined to settle upon her an allowance of £10,000 a year, of which she should have absolute control, although the Duchess of Kent desired to be appointed her daughter's trustee. The King, however, did not live to make the settlement, as he died on May 20.

Immediately on the death of the King, the Archbishop of Canterbury, the Marquis of Conyngham, and Dr. Howley set out for Kensington, which they reached at 5 A. M., and announced to the Princess Victoria the death of the King. The Privy Council assembled at Kensington at 11 o'clock, and the usual oaths were administered to the Queen by Lord Chancellor Cottenham, after which all present did homage. By the death of William IV his brother, the Duke of Cumberland, became King of Hanover, a throne to which Victoria could not succeed because in that state the Salic law prevailed. The public proclamation of the Queen took place on the 21st, at St. James's Palace. The Queen opened her first Parliament in person, and before the close of the year a civil list bill was passed settling £385,000 a year on her Majesty. There was also passed a bill to increase by £30,000 the income of the Duchess of Kent.

The coronation of the Queen took place June 28, 1838, in Westminster Abbey, and Parliament voted £70,000 to be spent for the ceremonial. It was arranged that the sovereign's procession to the Abbey through the streets should be made a finer show than on previous occasions; and it drew to London 400,000 country visitors—an enormous number, considering how few were the railways and how scanty was the hotel accommodation which the capital had to offer. On the night of June 27 more than 40,000 people bivouacked in the streets, and long before daybreak a vast multitude thronged Whitehall and all the streets leading to the Abbey; but order was so well kept that no uninvited person forced his way into the building. The Queen made the passage from Buckingham Palace to Westminster Abbey in the state coach. After her entrance there the Archbishop of Canterbury made the presentation of the Queen to her subjects; after prayers and a sermon by the Bishop of London, her Majesty stood by the altar, and with her hand on the Bible took the oath, afterward kissing the book; then, seated in the coronation chair above the mystic stone of Scone, she was anointed with holy oil, presented with swords and spurs, invested in the imperial robe, and handed the scepter, the orb, and the royal ring; then the Archbishop of Canterbury took the crown from the altar and placed it on her head, and as he did so all the peers and peeresses donned their coronets, and a deafening acclamation of "God save the Queen" arose, to be repeated again and again, while the organ pealed

forth the national anthem. When the tumult had subsided trains of peers ascended the steps of the throne to do their homage—first touching the crown with the right hand, then bending the knee and kissing the Queen's hand.

Within a year the court was brought into sudden disfavor with the country by the political crisis known as the Bedchamber Plot. In May, 1839, the Whig ministry had a majority of only five in the House of Commons upon a proposal to suspend the Constitution of Jamaica, and therefore it resigned. The Duke of Wellington declined the premiership, but recommended Sir Robert Peel, who undertook the task of forming an administration, but was met at the beginning by a difficulty for the solution of which there was no precedent. The whole theory of the parliamentary responsibility of the ministry had been developed since the time of Queen Anne. Peel stipulated, on forming his Cabinet, that the mistresses of the robes and the ladies of the bedchamber who had been appointed by the Whig administration should be removed; but to this the Queen would not consent, and she wrote curtly that the course proposed by Sir Robert Peel was contrary to usage and repugnant to her feelings; the Tory leader then had to inform the House of Commons that, having failed to obtain the proof which he desired of her Majesty's confidence, it was impossible for him to accept office. The Whig ministry under Lord Melbourne was recalled, and the Premier declared by resolution in Cabinet that the offices held by ladies in her Majesty's household should be exempt from political changes. The Queen acknowledged later that she had been in the wrong in the matter, and repaired the blunder when the Tories again formed the ministry.

It had been arranged even in the Queen's infancy, by the Duchess of Kent and her two brothers—Leopold, whose first wife was the Princess Charlotte of Wales, daughter of George IV, who died in 1817, and who became King of the Belgians in 1831, and the Duke of Saxe-Coburg-Gotha—that Victoria should marry Prince Albert, younger son of the latter, who was born in the same year as the Queen. Although the arrangement was fully understood and acquiesced in by Queen Victoria and Prince Albert, the Queen wrote to King Leopold in 1839 that she did not wish to marry for some years. A few months later Prince Albert, with his brother, Prince Ernest, arrived in England, and during his visit to Windsor Castle the Queen offered him her hand. On Nov. 23, after the return of the prince to his home, the Queen announced to the Privy Council her intended marriage with her cousin. Baron Stockmar was sent to England in January, 1840, as representative of Prince Albert to settle the treaty of marriage and to make arrangements for the prince's future household. But now the court's quarrel with the Tories in 1839 brought disagreeable consequences. The Queen's announcement of her betrothal was made in the House of Lords on Jan. 16 before a brilliant assemblage of the most eminent people in the land, and it was enthusiastically received. When the Government proposed that Prince Albert should receive an annuity of £50,000 they sustained a severe defeat. An amendment moved by Mr. Hume for reducing the allowance to £21,000 was negatived; but the amendment of Col. Sibthorp—a politician of no great repute—for making the annuity £30,000 was carried against the ministers by 262 votes to 158, the Tories and Radicals going into the same lobby and many ministerialists taking no part in the division. All this mortified Prince Albert exceedingly and gave him a poor idea of the welcome

that awaited him in England. Parliament also withheld the title of Prince Consort until 1857, and this left the rank of Prince Albert uncertain and led to many disputes and mortifications not only in England, but during the royal visits to the Continental courts.

The Queen's marriage was solemnized on Feb. 10, 1840, in the Chapel Royal, St. James's. The one regret of the London people was that a ceremony so fair did not take place in Westminster Abbey; for Holbein's small chapel in St. James's was ill suited for a great display. However, all that was seen or heard of the wedding pleased the people well.

During the Queen's reign several attempts were made on her life. The first was by Edward Oxford, who fired at the Queen as she was driving with Prince Albert up Constitution Hill in an open carriage; the second attempt was that of John Francis in 1842, at about the same place, and was followed about a month later by that of a hunchback named Bean made as the Queen was passing from Buckingham Palace to the Chapel Royal; in 1882 Robert Maclean fired as the Queen was leaving the station at Windsor, and there were other so-called attacks made with unloaded pistols.

Queen Victoria had nine children—four sons and five daughters—namely, Victoria Adelaide, Princess Royal, born Nov. 21, 1840, who married in 1858 the Crown Prince Frederick of Prussia, afterward Emperor of Germany; Albert Edward, Prince of Wales, born Nov. 9, 1841, married in 1863 to Princess Alexandra of Denmark; Alice Maud Mary, born April 25, 1843, who was married in 1862 to Louis IV, Grand Duke of Hesse, and died in 1878; Alfred, Duke of Saxe-Coburg-Gotha, Duke of Edinburgh, born Aug. 6, 1844, married in 1874 the Grand Duchess Marie, daughter of Alexander II, Emperor of Russia, died in 1900; Helena, Princess Christian, born May 25, 1846, married in 1866 Prince Frederick Christian of Schleswig-Holstein; Louise, born March 18, 1848, married the Marquis of Lorne in 1871; Arthur, Duke of Connaught, born May 1, 1850, married Princess Louise of Prussia in 1879; Leopold, Duke of Albany, born April 7, 1853, married in 1882 Princess Helena of Waldeck-Pyrmont, died in 1884; and Beatrice, born April 14, 1857, married Prince Henry of Battenberg in 1885.

The residences most used by the Queen were Buckingham Palace, Windsor Palace, both belonging to the sovereign, and Osborne House, Isle of Wight, purchased by the Queen, who took possession of it in 1843, and Balmoral, in the Scottish Highlands, also purchased by the Queen from the Earl of Aberdeen in 1848.

In March, 1861, the Queen's mother, the Duchess of Kent, died, and in November of the same year the Prince Consort died. Throughout England the death of the Prince was wholly unexpected, and the news caused great surprise and grief. The Prince was buried in the mausoleum at Frogmore, which the Queen had built.

The Prince of Wales's marriage was solemnized at Windsor on March 10, 1863. The public entry of the bride-elect into London on March 7 was a sight which afforded a remarkable display of loyalty and enthusiasm. The Queen witnessed the wedding from the private pew or box of St. George's Chapel, Windsor, but she wore the deep mourning which she was never wholly to put off to the end of her life, and she took no part in the festivities of the wedding. In January, 1864, a son was born to the Prince of Wales, and was christened Albert Victor after both his grandparents.

In 1867 the Queen published *The Early Days of*

the Prince Consort, and in 1869 her diary, *Leaves from the Journal of our Life in the Highlands*, of which a second instalment appeared in 1885.

On Feb. 17, 1876, Disraeli introduced in the House of Commons a bill to authorize the Queen to take, in addition to her other titles, that of Empress of India. The proposition was received with disfavor by the Liberals, and excited general disapproval among press and people. It was the subject of long and fierce debates in the house, but was insisted upon and carried through by the ministry. The bill passed the House of Commons March 23, the House of Lords April 7, and received the royal assent April 27, and on April 28 the Queen issued a proclamation assuming her new title. At the time of the passage of the bill in the Commons the Government made pledges that the new title should be used only with regard to Indian affairs.

In 1878 the death of the Princess Alice took place; in 1888 those of the German Emperors William I and Frederick III; in 1884 that of Leopold, Duke of Albany, youngest son of the Queen; in 1892 that of Prince Albert Victor, Duke of Clarence and Avondale, eldest son of the Prince and Princess of Wales; in 1896 that of Prince Henry of Battenberg, husband of the Queen's youngest daughter, who died on board the ship *Blonde* near the West African coast, whither he had accompanied an expedition against the King of Ashanti. In 1899 the grandson of the Queen, the hereditary Prince of Saxe-Coburg, died; in 1900 his father, the Duke of Edinburgh, second son of the Queen, and Prince Christian Victor, son of Princess Christian.

On the occasion of the coming of age of the Queen's sons and the marriages of her daughters Parliament made provision. The Prince of Wales, in addition to the revenues of the duchy of Cornwall, had £40,000 a year, the Princess £10,000, and an addition of £36,000 a year for their children was granted by Parliament in 1889. The princess royal received a dowry of £40,000 and £8,000 a year for life; the younger daughters £30,000 and £6,000 a year each. The Dukes of Edinburgh, Connaught, and Albany were each voted an income of £15,000 and £10,000 on marrying. All these grants were voted under the conditions of the general financial settlement accepted by Parliament at the beginning of the Queen's reign, according to which certain Crown lands were transferred to the nation.

June 20, 1887, was the fiftieth anniversary of the coronation of Queen Victoria, and the country threw itself into the celebration with enthusiasm; large sums of money were everywhere subscribed; in every city, town, and village something was done both in the way of rejoicing and in the way of establishing some permanent memorial of the event. In London the day itself was kept by a solemn service in Westminster Abbey to which the Queen went in state, surrounded by the most brilliant royal and princely escort that had ever accompanied a British sovereign, and cheered on her way by the applause of hundreds of thousands of her subjects. Around her carriage rode her sons and sons-in-law, and some of her grandsons, conspicuous among them being the noble figure of the ill-fated crown prince, afterward the Emperor Frederick, with his son, the present German Emperor. Waiting to receive her Majesty in the Abbey were the ambassadors and ministers of all nations, the peers and the peeresses, the members of the House of Commons, the judges, the most distinguished officers of both services, and a multitude of all that is eminent in every branch of the national life, while grouped together and gazed

upon by every eye stood a representative body of the Indian princes. Other ceremonials connected with the celebration of the jubilee were the opening of the People's Palace on May 14, a review of volunteers on July 2 at Buckingham Palace, the laying of the foundation stone of the Imperial Institute on July 4, a review of 58,000 troops at Aldershot on July 9, and on the 23d a review of the fleet at Spithead, in which 135 vessels of war were gathered together, including 26 armored and 9 unarmored ships, 38 first-class torpedo boats, the same number of gunboats, and 12 troop ships.

In September, 1896, the reign had reached a point at which it exceeded in length that of any other English sovereign; but by her special request all public celebrations of the fact were deferred until the following June, which marked the completion of sixty years from her accession. The prime ministers of all the self-governing colonies, with their families, were invited to come to London as the guests of the country to take part in the jubilee procession; and at the same time drafts from the troops that preserve order in every British colony and dependency were brought home. The programme of the procession was quite different from that of 1887. In the latter case the Queen had driven from the palace to Westminster Abbey, surrounded by the princes of her family; had there taken part in a service which was almost a repetition of the coronation service; and had quickly returned home. On the present occasion her purpose, as officially announced, was "to see her people and personally to receive their congratulations"; and with this intention the route chosen was three times as long, and three times as many persons were thus enabled to offer their greetings to the Queen. The route taken was from Buckingham Palace, along Constitution Hill, Piccadilly, St. James's Street, Pall Mall, and the Strand to St. Paul's Cathedral, where the procession halted while a short service was held on the steps, the Queen not leaving her carriage on account of her lameness. Thence she proceeded to the Mansion House, where she received an address, and then—the great novelty of the day—crossed London Bridge, traversed south London amid crowds as great and enthusiastic as those which thronged the West End, and returned home by way of Westminster Bridge and St. James's Park. Some time later the Queen gave a garden party at Buckingham Palace, and held numerous receptions at Windsor, including that of the colonial troops and that of the members of the House of Commons and their wives. The Queen herself held a great review at Aldershot; but a much more significant display was the review by the Prince of Wales in her behalf of the fleet at Spithead on Saturday, June 26.

In May, 1899, the Queen performed what proved to be her last ceremonial function in London, the laying of the foundation stone of the buildings that were to complete the museum—to be called the Victoria and Albert Museum—which had been planned forty years before by the Prince Consort, and one week later she celebrated her eightieth birthday. In the spring she visited Dublin, where she spent four weeks at the vice-regal lodge. The following autumn her health began to fail, but she continued her usual occupations, and before Christmas journeyed to Osborne, where she died Jan. 22, 1901. The first portion of the ceremonies in connection with the funeral took place on Friday, Feb. 1, when the remains were removed from Osborne and placed on board the royal yacht *Alberta*, which conveyed them across the Solent to Portsmouth harbor. The coffin was carried

out of the house by Highlanders and bluejackets, and placed on a gun carriage adapted as a funeral car. The yacht left East Cowes a few minutes before 3 P. M., and proceeded through a long avenue of saluting war vessels, British and foreign, followed by the Victoria and Albert with the royal mourners on board, and other vessels. The Alberta arrived in Portsmouth harbor shortly before 5 P. M. The members of both houses of Parliament were on board the liners Scot and Dunvegan Castle, which took up positions between some of the war ships. On Saturday, after a short service on board the Alberta, the coffin was carried from the yacht to the train at Gosport, and arrived at Victoria at 11 o'clock. The procession moved by way of Buckingham Palace Road, the Mall, St. James's Street, Piccadilly, Hyde Park from Apsley Gate to the Marble Arch, Edgware Road, and London Street to Paddington station. The route for the whole distance was lined by 33,000 regular troops and volunteers, with police, behind whom had assembled, hours before the time fixed for the passing of the procession, the largest crowds that have ever gathered, even in London. The first part of the procession consisted of troops, including representative detachments of all arms of the service, and also of the navy and marines. Then came the military *attachés* to the foreign embassies, the headquarters staff of the army, the commander in chief, the earl marshal (the Duke of Norfolk), and other high officers of the household, and a large number of the royal aids-de-camp. The coffin was followed by the King, the German Emperor, and the Duke of Connaught riding abreast, and after them the Kings of Portugal and Greece, nearly 40 princes, representing every royal house in Europe, and a long array of ambassadors and other representatives of foreign powers. The march past occupied nearly an hour. At Paddington the coffin was placed in a catafalque prepared for it in the late Queen's railway carriage. The train reached Windsor shortly after 2 P. M. The coffin was drawn by bluejackets—the artillery horses proving unmanageable—to St. George's Chapel, where the funeral service was conducted by the Archbishop of Canterbury and the Bishop of Winchester, and at its close Norroy, deputy to Garter king-of-arms, proclaimed the death of Queen Victoria and the accession of King Edward VII. The interment took place on Monday afternoon at the royal mausoleum, Frogmore. Shortly before 3 o'clock the coffin was brought out of the Albert Memorial Chapel and placed on the gun carriage, and a procession was then formed, composed almost exclusively of the royal, imperial, and princely mourners, which proceeded through the castle precincts and down the Long Walk. The route was kept and lined by troops, behind whom were gathered many thousands of spectators. For a portrait of Queen Victoria, see *Annual Cyclopædia* for 1897, page 365.

Victorian Reign, Events of the.—The reign of Queen Victoria, as it was the longest in English history, so also was it the most illustrious when judged by the great events that distinguish it, the progress of the nation in power and wealth, the spread of the empire, the advancement in the comforts and conveniences of life, and the achievements of British subjects in the arts, in science, in literature, as well as in vast schemes of business enterprise, in war, and in diplomacy.

Extent and Population of the Empire.—At the beginning of the reign the empire comprised 8,340,000 square miles and had a population of 168,000,000. At the close, the area had increased over 3,000,000 square miles—it was estimated in 1898 at 11,712,170 square miles—and the popula-

tion had reached nearly 400,000,000. The United Kingdom alone had about 25,000,000 population in 1837, and in 1898 the number of inhabitants was estimated at 40,188,927. The population of England and Wales had more than doubled; that of Scotland has almost doubled; but Ireland's has fallen from about 7,500,000 to about 4,500,000; the highest number was reached in 1845, when the population was 8,295,061. The population of London, which was not more than 1,500,000 in 1837, was in 1898 4,504,766 in the registration district, and, including the whole of greater London, 6,408,321.

The British Empire in India and the feudatory states extend over an area of over 1,800,000 square miles, and has a population of more than 287,000,000. The protectorates and spheres of influence in Africa and Asia cover about 2,240,000 square miles, and have a population of over 36,000,000. The various colonies on continents and islands have a total area of 7,550,533 square miles and a total population of 21,657,782. At the beginning of Victoria's reign England was in control of a small territory in the southeastern part of Australia, a little colony at the southern extremity of Africa, part of Hindustan, the Straits Settlements, British Guiana, and British North America. Now the whole of Australia, parts of Borneo and New Guinea, New Zealand, and other neighboring islands, a vastly extended region in India, and a large part of South Africa, with territories on the eastern and western coasts of that continent, are included in the empire. British North America has been enlarged by the southwestern corner and by the islands discovered in the northern sea.

Growth in Revenues and Military Strength.

—The public revenues of the United Kingdom have more than doubled during the period under review. The receipts for the year ending March 31, 1898, were £106,614,004, about 83 per cent. of which was from taxation.

The total strength of the armed forces of the Crown was 101,000; it is 920,000. The navy in 1837 consisted of less than 200 wooden sailing ships; at the present time it consists of more than 400 iron-built ships propelled by steam.

Prime Ministers.—When Victoria came to the throne a Whig ministry under Lord Melbourne had been in power four years except for a short period in 1834-'35, when Sir Robert Peel's first ministry was in office. The law then required that a new Parliament should be summoned at the accession of a sovereign; there was therefore a dissolution; the elections reduced the Whig majority, but did not radically alter the position of parties, and Lord Melbourne's administration continued. The Duke of Wellington was then in the House of Lords and wielded great influence as a Tory leader. Lord Brougham and Lord Lyndhurst were the leading debaters in that house. Benjamin Disraeli took his seat in the House of Commons for the first time in 1837 as member for Maidstone. Other names then on the roll of Parliament have since become famous, among them those of Mr. Gladstone, Edward Lytton Bulwer, George Grote, Lord Palmerston, Lord Stanley (afterward Lord Derby), Lord Morpeth (afterward Lord Carlisle), Daniel O'Connell, and Richard Lalor Shiel. Lord John Russell was Home Secretary and leader of the House of Commons; Sir Robert Peel was leader of the Opposition. It was about this time that the party name "Conservative" began to be substituted for "Tory."

Sir Robert Peel's second ministry began in 1841 and lasted till 1846, when the Whigs came in again with Lord John Russell as Premier. He

went out of office in 1852, but resumed it as Earl Russell in 1855, to remain only about eight months, but in the time intervening between his two premierships he was in every Whig Cabinet. The Earl of Derby, who became Prime Minister as a Conservative in 1852, in 1858, and in 1866, remained in office each term but a short time. The Earl of Aberdeen was the head of a coalition ministry from 1852 to 1855. Lord Palmerston's two Whig administrations were from 1855 to 1858 and from 1859 to 1865. Mr. Disraeli, who was Chancellor of the Exchequer under Lord Derby, succeeded him in February, 1868, but near the close of the year gave place to Mr. Gladstone, who had been a Conservative in his earlier parliamentary career. Mr. Disraeli was Premier again in 1874, but in 1880 the Government had become unpopular for many reasons; the wars in Afghanistan and in Zululand and the general state of financial depression, together with the Irish agitation, combined to turn the feeling against the party in power; the Conservatives were defeated and the Liberals had a large majority. The Queen sent for Lord Hartington, and then for Lord Granville; but Mr. Gladstone was the only possibility. The rivalry of the two great party leaders, Mr. Disraeli and Mr. Gladstone, ended with the death of Mr. Disraeli, then Lord Beaconsfield, the following year. Mr. Gladstone was succeeded by the Marquis of Salisbury in 1885, but began his third administration in February, 1886. In August of the same year Salisbury became Premier for the second time; his party was defeated in 1892 and Mr. Gladstone again became Prime Minister. He resigned in 1894, and Lord Rosebery, the Foreign Secretary in his Cabinet, took his place. In 1895 the Government, having been beaten in Parliament, resigned, Parliament was dissolved, and the election resulted in favor of the Conservatives and Liberal Unionists against the home rulers; Lord Salisbury formed a Unionist Cabinet, and was still Prime Minister at the close of the reign.

The Canadian Rebellions.—One of the earliest events of the reign was the rebellion in Canada in 1837. It began with discontent in Lower Canada, where grievances against the Government had been strongly felt for years. The Representative Assembly protested against the arbitrary conduct of the governors, illegal appropriation of public money, and the composition of the Legislative Council, which they desired to have made elective. The Governor issued warrants for the arrest of the leaders of the agitation, and resistance to the arrests led to the breaking out of the rebellion. There was some fighting and bloodshed, but the insurrection was speedily suppressed, though the discontent continued; and Upper Canada also had its grievances. The home Government felt the justice of the complaints, and Lord Durham was sent over to investigate and report on the best measures of reform, with the understanding that he was to have dictatorial powers. The bill which passed Parliament after his departure gave him much less power; he, however, continued to act as if endowed with full authority for reconstruction, in consequence of which he was recalled. But the wisdom of his report was acknowledged and its recommendations adopted. It laid down the lines for government of colonies, which were followed not only for Canada, but for other British colonies, and have proved so eminently successful, giving a large measure of home rule and placing the internal affairs of the colony in the hands of the colonists themselves. His recommendation that the two provinces should be united was carried out in 1840, and the other reforms were gradually introduced. Lord Durham also recommended that

provision be made for the admission of the remaining colonies of North America into federal union with the Canadas whenever their Legislatures should agree upon such union. In 1867 the plan was carried out by the formation of the federation as the Dominion of Canada, in which the North American provinces are united. In 1869 the charter of the Hudson Bay Company expired, and most of its territory was transferred to the Dominion for £300,000. Upon this a rebellion arose in the Red river country, led by Louis Riel, and troops were sent over under command of Col. Wolseley; but before his expedition could reach the Red river country (the Canadian Pacific Railroad did not then exist) the trouble was practically over, owing to a promise of amnesty through Archbishop Taché.

The Rebecca Riots.—These are chiefly memorable for their odd name and the quaint reason for it. They were outbreaks during one of the early years against the toll charges on the roads in Wales, and took their name from a verse in Genesis, where it was said to Rebecca, "Let thy seed possess the gate of those which hate them." The gate, according to the interpretation, was of course the toll gate, and mobs of men dressed as women gathered at night and destroyed the bars and tore up the roads. There was some bloodshed before the rioters were subdued. An inquiry showed that there was reason in the complaints; the large toll charges pressed heavily on the poor people in the country districts; and measures were taken by which the wrongs were redressed.

The Repeal of the Corn Laws.—The grain-protection law, which was the cause of the anti-corn-law agitation that raged for several years, had been passed in 1815. It was a measure in favor of English agriculturists; it practically forbade the importation of foreign wheat till the price of the home-grown had risen to a certain high figure. Subsequently acts were passed establishing sliding scales by which the duty on imported grain was lowered in proportion as the price of the home-grown advanced. Naturally the commercial and manufacturing classes were opposed to this policy, while it was upheld by the landowners and farmers whose products were protected. An Anti-Corn-Law Association formed in London came to nothing, but free-trade principles began to gain adherents, and in 1838 the Manchester Chamber of Commerce sent to Parliament a petition for the repeal of the corn laws. Manchester now became the headquarters of a movement that spread rapidly in the manufacturing and commercial centers, where associations were formed. Charles Villiers was the nominal leader of the free-trade party in Parliament, but Richard Cobden and John Bright are the names most prominently associated with the movement for repeal and the principle of free trade. While the doctrine was making gradual progress the potato famine in Ireland, in 1845, brought matters to a sudden crisis. A demand arose throughout Ireland for the opening of the ports, and the ministry was denounced for not calling Parliament together to pass a measure of relief. Lord John Russell, leader of the Whig party, wrote a letter to his constituents about this time announcing his adhesion to the principles of free trade. Sir Robert Peel, Prime Minister and leader of the Conservative party, was likewise converted to the views of the Anti-Corn-Law League. But his Cabinet was divided on the question, and he offered his resignation to the Queen, who sent for Lord John Russell; but the Whig leader found it impossible to form a ministry, and upon the Queen's request Sir Robert Peel withdrew his resignation; Lord Stanley, who

would not give up his opposition, left the Cabinet; Mr. Gladstone took his place as Secretary of State for the Colonies; and Parliament was summoned to meet Jan. 22, 1846. Meantime the protectionists were not inactive. They declined to believe in any prospective famine, and denounced the proposed measures as a blow at the agricultural interests. It was as a champion of their cause during the discussion of the corn importation bill that Mr. Disraeli made his first brilliant success in Parliament, though he had been a member for nine years; and from this time on he was recognized as a Tory leader. The bill was passed June 26, 1846.

The Chartist Agitation.—Chartism, which took its name from what was called the "People's charter," arose about 1838, and was a source of agitation for ten years. The charter demanded six reforms—manhood suffrage, equal electoral districts, vote by ballot, annual Parliaments, payment of members, and abolition of the property qualification for representatives. There were noisy meetings and processions; there were riots at Newcastle, Birmingham, and Newport. A monster petition, the size of a cart wheel, was rolled into the House of Commons; it was said to have 1,250,000 signatures. In 1842 another petition with, as was alleged, 3,000,000 names, was brought to the Commons. Newspapers advocating the principles of chartism were established all over the country, and the general poverty and privation among the working classes helped to swell the ranks of the agitators. Feargus O'Connor, the leader of the movement, was returned for Nottingham at the general election of 1847. In 1848, encouraged, or excited, perhaps, by the revolutionary movements on the Continent, the chartists planned a great demonstration. They were to form on Kennington Common and march in military order to present another monster petition to Parliament, and give it one more opportunity to accede peaceably to the demands of the reformers. London was filled with apprehension at the prospect of hostile encounters and bloodshed. But the Duke of Wellington had taken great precautions for guarding the public buildings and protecting all parts of London. Nearly 200,000 persons, it is said, were sworn in as special constables, one of whom was Prince Louis Napoleon, afterward the Emperor Napoleon III. Their services were not needed, however; the demonstration fell far short of what had been expected; the petition had not nearly so many signatures as had been claimed; the gathering was comparatively small, and composed in large part of mere onlookers; the procession was not formed, for O'Connor insisted on obedience to the order of the authorities; and chartism died out. Some of the reforms it called for have since been effected.

Wars with the Afghans.—In 1838 England declared war against Dost Mohammed, ruler of Cabul, who had attacked her ally, Runjeet Singh. Shah Soojah-ol-Moolk had a hereditary claim to the throne, and England proposed to restore it to him. British troops were sent into the country in 1839, and in 1840 Dost Mohammed surrendered and Shah Soojah was installed. But, Nov. 2, 1841, the greater part of the troops having been withdrawn, the Afghans in Cabul rose against the British and murdered their representatives. The natives attacked the English in their forts with success. Sir W. Macnaghten was in charge, and when the situation seemed hopeless he received a proposal from Akbar Khan, a son of Dost Mohammed, who led the Afghans, that they two should form a secret alliance, should combine against the other chiefs, and keep Shah Soojah on the throne

as nominal ruler, with Akbar as his Vizier. Unfortunately, the base proposal was listened to, and an agreement made to treat on these terms; but when, accompanied by three of his officers, the English representative went out to a conference with Akbar Khan and his company, he was treacherously slain, one of the three officers was killed, and the other two taken prisoners. Notwithstanding this, Gen. Elphinstone treated with the Afghans and accepted their terms, which were the withdrawal of the British from the country, leaving behind all their treasure and all their guns but six, which were allowed them for their protection in their winter journey through the wild country that had to be traversed and amid the murderous savages that beset the way. It led through the great dark gorge known as the Koord Cabul pass. The army consisted of about 4,000 fighting men, of whom a small proportion were Europeans; of camp followers there were about 12,000, including many women and children. Gen. Elphinstone and two other officers, with the women and children, were taken from the army on the march by Akbar Khan, to be kept as hostages. Of the remainder of the 16,000, only one came through alive—Dr. Brydon.

Gen. Sale, commander of the garrison at Jelalabad, refused to be bound by the terms of the forced treaty; he held his post against a siege by Akbar Khan, and when he was certain that re-enforcements were coming through the Khyber pass under Gen. Pollock he went out to battle and defeated the besiegers. Other successes followed, and those of the hostages taken by Akbar Khan that were alive were rescued. Gen. Elphinstone had died. Lord Ellenborough, who had in the meantime become Governor General, issued a proclamation announcing that the British Government would make no further attempt to interfere with the Afghans in their choice of a sovereign. Shah Soojah, who had not been popular with the people, had been assassinated, and Dost Mohammed was restored to power in Cabul.

Another Afghan war broke out in 1878, nearly forty years later. Russia seemed to be intriguing with Shere Ali, son of Dost Mohammed and ruler of Cabul. A special mission was sent by the Indian Government to induce him to allow a British resident to remain at his capital. Shere Ali refused to receive the embassy, which numbered about 1,000 men. Troops were then massed on the frontier and Shere Ali placed a force in the Khyber pass. The Indian Government, therefore, under instructions from England, required an apology and the reception of a permanent British mission in his territory, and he was notified that unless he replied satisfactorily his intentions would be considered hostile and he would be treated as a declared enemy. He made no satisfactory reply and hostilities were begun, Gen. Roberts commanding the British forces. The Russian embassy was withdrawn at the request of the British with the statement that there was no ground for the belief that the Russian Government had influenced Shere Ali to reject the British embassy. The Afghans made little resistance; Shere Ali fled from Cabul, and soon after died. His son and successor, Yakoub Khan, signed a treaty at Gandamak, May 5, 1879, agreeing to admit a permanent British resident at Cabul; his foreign affairs were to be conducted under advice of Great Britain, and he was to be protected from foreign aggression. The British authorities were to have complete control over the Khyber and Michnee passes, and the frontier was settled in a way not disadvantageous to Great Britain. The Ameer was to receive £60,000 a year so long as the treaty

was observed. But on Sept. 3 the British residency was attacked by mutinous troops; Sir Louis Cavagnari, the British envoy, with most of the others at the residency, was murdered. The Ameer represented that he was not responsible for the outbreak, but he was sent as a prisoner to India after the British troops had again taken Cabul, at the close of the year. Abdurrahman Khan was placed on the throne in July, 1880, and received an annual subsidy of 1,200,000 rupees, which has since been increased to enable him to hold his territory independently. A British garrison held Candahar.

When the new Government came in it was announced that the troops would be withdrawn from the country. Lord Beaconsfield protested against the Government "doing everything they could to inform every being in Central Asia, and in every other part of Asia, that they meant to cut and run from the scene of a splendid conquest." Following the British withdrawal there was a rebellion by Ayoob Khan, in which the English troops did not interfere; he was finally defeated, and Abdurrahman kept the throne.

In 1883 Russia made some advances in the neighboring country, and Great Britain thereupon took measures to have the frontiers defined; this was followed by more or less alarm in regard to the designs of Russia before the delimitation was accomplished. There was some trouble with the Ameer in 1893-'94, and the boundary between the British possessions and Afghanistan was more definitely settled. Various hill tribes on the frontier have been subdued in recent years; the public attitude of the Ameer has been neutral during these wars.

Relations with China.—The Opium War began in 1839 with the confiscation by the Chinese authorities of a large quantity of opium brought into China, contrary to Chinese law, by English traders, who bought from the East India Company the opium grown in India. The superintendents appointed by the English Government to have charge of the commerce between the countries gave no aid to the Chinese authorities in their efforts to stop the illicit traffic, and the Chinese believed that the British Government intended to protect it. Announcement was made, however, that her Majesty's Government would not protect British subjects in violating the laws of any country with which they were trading, and that they themselves must bear any loss they might meet in consequence of such acts. Notwithstanding this, the Government honored the request the chief superintendent made after the opium was seized for as many ships as the Governor General of India could spare. Ships were sent, the island of Chusan was taken, Ningpo and Amoy fell, and the British troops were before Nanking when the Chinese, who had fought bravely, saw that resistance was useless and sued for peace. By the treaty, in 1842, the island of Hong-Kong was ceded to England, five of the chief ports were thrown open to British traders, and the right to establish consuls in them was conceded. An indemnity of £4,500,000 sterling was exacted, besides £1,250,000 to the merchants for the destroyed opium.

A second Chinese war broke out in 1857, in consequence of the seizure by the Chinese authorities of the *lorcha Arrow*, a small boat or cutter, in October, 1856, on a charge of piracy. The owners claimed that it was a British vessel, and it was so registered; but the registration had been fraudulently obtained. The *Arrow* was a Chinese vessel. Nevertheless, the cause of the owners was taken up by the plenipotentiary at Hong-Kong, Sir John Bowring. At his demand the Chinese Governor

of Canton, Yeh, sent back the men that had been taken from the boat, and promised that in future care should be taken not to interfere unlawfully with British vessels; but he would not offer an apology, which was demanded, for the case of the *Arrow*, because he maintained that it was not properly a British vessel. Then Sir John Bowring ordered the bombardment of Canton by the English fleet, and Gov. Yeh retaliated by offering a reward for every head of an Englishman. A motion censuring the acts of the British representatives in China was defeated in the House of Lords by a vote of 146 to 110; a similar motion was carried in the Commons by 263 to 247. The treaty of Tientsin was concluded after the British had taken the Taku forts (1858); it granted an indemnity of £4,000,000 and a reduction of transit dues. The treaty was violated in 1859, when, after some further hostilities, it was ratified. During these hostilities, in which France took part, the summer palace was pillaged and burned, destroying property, Gen. Gordon said, that could not be replaced for £4,000,000; there were over 200 buildings, and the grounds covered an area 8 by 10 miles in extent. The destruction was in retaliation for the murder of Englishmen. It was soon after this that Major Gordon, "Chinese Gordon," assisted the Chinese Government in putting down the Tai-ping rebellion.

In 1875 relations with China again became strained in consequence of interference with travelers and the murder of one on the frontier, and a convention was entered into which guaranteed the right of foreign travelers to protection. In 1886 England seized Port Hamilton at the time when a war with Russia seemed imminent, but restored it the following year on demand of the Chinese Government. In later years the demand for concessions has occasionally brought about trouble between representatives of the nations. The events of the year 1900 are given elsewhere in this volume.

Relations with France.—The friendly relations between France and England were more or less disturbed several times during the reign. Once was in connection with the intrigues of Louis Philippe to bring about the "Spanish marriages" which were to give to France virtual control of Spain. The first project was to marry the two sons of Louis Philippe to the young Queen Isabella and her sister; but this was too sure to bring about trouble with other powers, and so the marriage with the Queen was given up, but the other took place in 1846: at the same time the Queen was married to the Duke of Cadiz, the choice also of the French King. This was deemed an act of perfidy on his part, as he had declared to Queen Victoria that he "would not hear of" his son's marriage to the Infanta.

Another incident that raised unfriendly feeling between the two countries was that of Queen Pomare, of the island of Tahiti, who appealed to England for protection when her island was seized by a French admiral in retaliation for some indignity shown to French residents by her subjects, with whom the protectorate of France which she had accepted was unpopular. There had been feeling in England at the time when the protectorate was forced upon the island. Now the indignation was heightened by the seizure of a missionary, Mr. Pritchard, who acted as British consul: he was only released on condition of his instantly leaving the island. After some months of negotiation the affair was settled, 1844, by the payment of an indemnity to Mr. Pritchard by France.

Louis Napoleon lived in obscurity in London from 1837 to 1840, and again from 1846 to 1848.

There lived, too, for a time, the Italian Orsini who formed the conspiracy to murder the Emperor, with a view to removing what he believed to be the influence that kept England from interfering to release Italy from Austrian rule. It was believed in France that the plot was arranged in England; the bombs thrown by the plotters, which killed 10 persons and wounded 156, were made in Birmingham. The French were very angry, and accused England of harboring conspirators and murderers. The French Minister for Foreign Affairs sent a dispatch asking if England considered that hospitality was due to assassins. The English people were likewise excited, and the fact that Lord Palmerston made no reply to that insulting dispatch, but brought in a bill to suppress conspiracies to murder, gave the impression that he was currying favor with Napoleon, and that "the very right of asylum which England had so long afforded to the exiles of all nations was to be sacrificed at the bidding of one who had been glad to avail himself of it in his hour of need." The result of the feeling aroused by this episode was the fall of Lord Palmerston's ministry, which just before had seemed secure in the favor of the people.

Louis Napoleon once more found a refuge in England after the disasters of the Prussian War and the loss of his throne, and he died there as had Louis Philippe more than twenty years earlier on his abdication, in consequence of the revolution that opened the way of the third Napoleon to power.

In 1860 a commercial treaty was concluded with France, by which some duties were removed and others greatly reduced.

When Louis Napoleon set up the empire in Mexico during the war of secession, England, which had united with him in a movement ostensibly to obtain satisfaction for certain claims against the Mexican Government, withdrew when his designs became evident. During the Franco-Prussian War the sympathies of the English people appear to have gone over to the French after their reverses, with the idea that Prussia was dealing too hardly with a fallen foe.

Great Britain and France entered into a controversy over their respective rights in East Africa about 1890. England obtained from Germany and Italy recognition of her right to the whole valley of the upper Nile as coming within her sphere of influence. France protested, and the diplomatic correspondence that ensued ended in the withdrawal of France from the post she had taken on the Nile. This was the much-discussed "Fashoda incident."

The alliances with France in the Crimean War and the troubles with China are spoken of elsewhere in this article.

Relations with Greece.—An Athenian mob in 1847 came very near involving England in war with France and Russia. The name of Don Pacifico, a Jew and British subject living in Athens, became a familiar word in Europe, though there was nothing remarkable about Don Pacifico except the exalted value which he placed upon his household effects. In that year orders were given in Athens prohibiting the usual Easter entertainment of Christians, consisting of the burning of an effigy of Judas Iscariot. The disappointed Christian mob, by way of consolation, wrecked and robbed the house of Don Pacifico, which stood near the place where the effigy was usually burned. He appealed to the Greek Government for compensation, placing his loss at £32,000. Among the items was a bedstead and its belongings which occupied a large place in the discussions of the sub-

ject. He valued the bedstead at £150, the sheets at £30, the coverings at £25, and a pillowcase at £10. About the same time another British subject, Mr. Finlay, made a claim against the Greek Government for some of his land which had been taken for the King's grounds; he had declined to accept the price offered. Further, a British midshipman had been arrested by mistake at Patros, and there were complaints from some subjects of the Queen in the Ionian Islands, which had been placed under a British protectorate by the treaty of Vienna. The English Government in 1850, by Lord Palmerston, who was the Foreign Secretary, made the claims a national demand, and as the Greek Government did not respond, the British fleet was ordered to the Piræus and seized all the Greek vessels found there. France and Russia protested, but Palmerston replied that it was a question between Greece and England. In time, however, the Government accepted an offer from France of arbitration; but this was not successful, and a difficulty arose which caused the withdrawal of the French minister from London, and the peace of Europe seemed to be in danger. At length, however, England yielded, and the claims were arbitrated, Don Pacifico receiving something over £1,000. The incident is noteworthy for the celebrated speech Lord Palmerston made in defense of his policy. The House of Lords passed a resolution which was in effect a vote of censure; in the Commons a resolution commending the action of the Government was passed after a debate of four days, in which Mr. Gladstone, Mr. Cobden, Mr. Disraeli, Mr. Sidney Herbert, and Sir Robert Peel took part against Lord Palmerston, and Mr. Cockburn, afterward Lord Chief Justice, spoke in favor of his action. Lord Palmerston's speech lasted about five hours, and his victory probably had much to do with his subsequent elevation to the premiership. He assumed that the question was whether England should protect her subjects wherever they might be or should leave them defenseless to foreign oppression. He said in conclusion: "I therefore fearlessly challenge the verdict which this house, as representing a political, a commercial, a constitutional country, is to give on the question now brought before it—whether the principles on which the foreign policy of her Majesty's Government has been conducted, and the sense of duty which has led us to think ourselves bound to afford protection to our fellow-subjects abroad, are proper and fitting guides for those who are charged with the government of England; and whether, as the Roman in days of old held himself free from indignity when he could say *Civis Romanus sum*, so also a British subject, in whatever land he may be, shall feel confident that the watchful eye and the strong arm of England will protect him against injustice and wrong."

The debate is also memorable as being the last in which Sir Robert Peel engaged. Going home from a ride in the park on the afternoon of the day when the division was taken, he was thrown from his horse, which shied in sudden fright, and after two or three days the injuries he had sustained resulted in his death.

In 1858, when Sir Edward Lytton was Secretary for the Colonies, Mr. Gladstone was appointed Lord High Commissioner to the Ionian Islands, the people of which had become restless under the British protectorate and desired union with the kingdom of Greece. The effect of the appointment, as described by Mr. McCarthy, is interesting: "The appointment created much surprise, some anger, and a good deal of ridicule at home. Sir Edward Bulwer Lytton had alluded in his dispatch to Mr.

Gladstone's Homeric scholarship, and this was, in the opinion of some politicians, an outrage upon all the principles and proprieties of routine. This, it was muttered, is what comes of literary men in office. A writer of novels [Mr. Disraeli] is leader of the House of Commons, and he has another writer of novels at his side as Colonial Secretary, and between them they can think of nothing better than to send a man out to the Ionian Islands to listen to the trash of Greek demagogues merely because he happens to be fond of reading Homer." The mission was unsuccessful, not from want of effort on the part of the commissioner, but because the islanders had set their hearts on union with Greece and did not care for any adjustment of their grievances against England. He drew up for them an elaborate system of constitutional government, but all they wanted of him was to send to the Queen their petition for release.

On account of the pledges made by the protecting powers and on the advice of England, the second son of the King of Denmark was elected in 1863, and has since reigned as George I. Then England gave over the islands, and they became part of the kingdom.

The Great Exhibition.—The idea of the great exhibition of 1851, if it did originate with the Prince Consort, was taken up by him and owed to him its realization. It was carried out in the face of much opposition. The popular notion appears to have been that England would be overrun with foreign thieves, revolutionists, and all sorts of rogues, and a prophecy to that effect was made in the House of Commons, while in the House of Lords Lord Brougham supported a petition against allowing the use of Hyde Park for such a purpose. Prince Albert was accused of a design to bring in foreigners to the subversion of English manners and morals. The prince persevered notwithstanding, and carried the project to complete success. The idea of the glass building was suggested by Mr. (afterward Sir) Joseph Paxton, head gardener on the Chatsworth estate of the Duke of Devonshire. The exhibition was open one hundred and thirty-eight days, and was visited by 6,007,944 persons. The profits amounted to £150,000; they were devoted to the establishment and endowment of the South Kensington Museum. The buildings of glass and iron were removed to form the Crystal Palace at Sydenham, which was opened in 1854. None of the doleful prophecies were fulfilled. The crowds were orderly and gave no trouble. Undoubtedly the exhibitions of foreign manufactures were of value as enlarging the ideas of British manufacturers, and it is probable that something of the insular terror of foreigners was driven from the minds of the common people. But the expectation that seems to have been entertained that the great exhibition was to usher in an era of brotherhood among the nations of Europe and a reign of universal peace has been cruelly disappointed. The history of the last half of the century is filled with one long series of wars in Europe, Asia, Africa, and America.

The Crimean War.—The first great war of the reign was that in the Crimea, between Russia on the one side and England, France, Turkey, and Sardinia on the other; Sardinia joined the allies in January, 1855. It began in 1854 and ended practically with the fall of Sebastopol in September, 1855, though the treaty of Paris was not made till March 30, 1856. The ostensible subject of quarrel between Russia and Turkey was the desire of Russia to protect the subjects of the Turkish Empire belonging to the Greek Church. But the real object of the Czar was supposed to be the extending of his dominions to Constanti-

nople. Indeed, the Emperor Nicholas had very frankly laid before the English Government a plan for dividing between them the territories of "the Sick Man" when the end should come. Napoleon III was anxious for a foreign war, to turn the attention of his people from affairs at home. July 3, 1853, two divisions of the Russian troops crossed the river Pruth to take possession of the Danubian principalities; war was declared Nov. 1, and Nov. 30 the Turkish fleet was destroyed in the harbor of Sinope, on the southern shore of the Black Sea. This event produced a great feeling in England against Russia, and the popular sentiment was for war. There was a large peace party, however, and the Prime Minister, Lord Aberdeen, did his utmost to avoid war. Lord Palmerston, Foreign Secretary, resigned because the Cabinet would not consent to a strong course against Russia; but they yielded, and he resumed his place. France and England demanded that the Emperor of Russia should withdraw from the territory of the Porte, and declared their intention to use force if necessary to compel him; they sent fleets to the Black Sea, and war was declared in February, 1854. Lord Raglan was placed in command of the English forces, and the invasion of the Crimea was decided upon. The allied English and French forces landed at Kalamita Bay in September, and gained a victory in the first battle, Sept. 20, at the passage of the Alma river. The victory was not followed up, and the exultation over it in England was very soon followed by indignation against the authorities when it became known that the army was wretchedly provided for. The hospitals were not properly organized, stores of food and medicine were spoiling in places where they could not be procured for use, and cholera was carrying off the men. The Russians used the interval after the battle of the Alma to protect the entrance to the harbor of Sebastopol by sinking 7 ships there, thus making speedy capture of the stronghold impossible. The allies went on to Balaklava, where the Russians attacked them, Oct. 25, and were repelled. In this battle occurred the famous charge of the Light Brigade, celebrated by Tennyson. Of the 607 men who made the charge in obedience to the strangely mistaken order, only 198 returned alive. Another attack the following day was likewise repelled. The battle of Inkerman, the hardest of the campaign, was fought Nov. 5, and was another victory for the allies; the Russian loss was estimated at 12,000.

When news of the wretched management of army supplies reached England a motion for a committee of inquiry resulted in a defeat of the Government, and Lord Aberdeen was succeeded by Lord Palmerston. The popular indignation, for some inscrutable reason, was at first turned against Prince Albert, and the most absurd charges of being in collusion with the enemies of England to humble and subdue her were brought against him. The parliamentary inquiry showed the suspicions to be baseless, and the agitation ceased. Some of the instances of mismanagement that came to the knowledge of the people at home during the winter sound strangely familiar. "Shameful frauds," says Mr. McCarthy, "were perpetrated in the instance of some of the contracts for preserved meat. Great consignments of boots arrived, and were found to be all for the left foot. Mules for the conveyance of stores were contracted for and delivered, but delivered so that they came into the hands of the Russians. Medical stores were left to decay at Varna, or were found lying useless in the holds of vessels in Balaklava Bay, which were needed for the wounded at Scutari."

The accounts of these things were sent to Eng-

land by the distinguished war correspondent William H. Russell, who was perhaps the first of the modern special war correspondents. It was at this time, too, that Florence Nightingale became famous.

The siege of Sebastopol lasted nearly a year. Emperor Nicholas died March 2, 1855, and Lord Raglan June 28. On Aug. 16 occurred the battle of Ichernaya. The allies attacked the Redan and Malakoff forts without success, June 18; on Sept. 8 the French carried the Malakoff by storm; seeing that the fall of Sebastopol was inevitable, the Russians evacuated it, having first set it on fire. By the treaty of Kars, which had been taken by the Russians, was restored to Turkey, and Russia received back the places the allies had taken. The Black Sea was made neutral, the Danube was thrown open to navigation, the integrity of the Ottoman Empire was guaranteed, and the Sultan issued an edict for improving the condition of his Christian subjects. The loss of England by the war was about 24,000 men, of whom about 20,000 died of disease. The French and Russian losses were much greater. The national debt was increased by about £41,000,000.

The Indian Mutiny.—There was trouble in 1843 with the people of Scinde, and some hostilities which ended in the subjugation and annexation of the three principalities comprising that province. The rulers, called ameers, were pensioned. Sir Charles Napier is reported to have said of the transaction: "We have no right to seize Scinde, yet we shall do so, and a very advantageous, useful, and humane piece of rascality it will be." When Scinde became a British province the Sepoys lost the extra allowances they had had for service in the enemy's country, and therefore mutinied. There were other mutinies among the Sepoy troops upon the annexation of the Punjab in 1849, after the wars with the Sikhs, and again in 1850 there was a mutiny at Govindgar, which was soon quelled.

The great Indian Mutiny broke out in 1857. It was probably due to the alarm with which the natives saw the rapid progress of the British power, but the immediate occasion appears to have been the notion that the cartridges, which at that time the soldiers had to prepare by biting off the ends, were made in paper greased with the fat of cows and hogs. Such use of the fat of the cow would be sacrilege to the Hindu, while the hog was an abomination to the Mohammedan, and to touch it a degradation. The first show of mutiny was made at Barrackpore, where the Sepoys refused to bite the ends of their cartridges, though they had been assured that none of the grease they objected to had been used in them. There were other similar demonstrations. The mutineers were tried, there were some executions, and at Meerut sentence to hard labor for ten years was given to others. The following day they were rescued by their comrades, who fired upon the officers and killed some of the European inhabitants. Then they marched to Delhi and announced their intention to restore the aged King of Delhi to the throne. Bahador Shah, the hereditary ruler, a descendant of Timour, was about eighty years of age and was living in the palace at Delhi, a pensioner of the East India Company. The siege of Delhi, the awful massacre at Cawn-pore by the orders of Nana Sahib, and the relief of Lucknow by Sir Colin Campbell followed, and in December, 1858, the rebellion was at an end. Among the English officers who were distinguished in the suppression of the rebellion were Sir John and Sir Henry Lawrence, Sir Henry Havelock, and Sir James Outram. One result of the mutiny was the transference of the administration from the

East India Company (called by the natives "John Company") to the Crown. Lord Canning, who was Governor General during the rebellion, was the first Viceroy of India.

The Indian Famine.—One of the most terrible events of the reign was the great Indian famine that began in 1896—not the first, but the most widespread and disastrous. It is stated that there were 13 famines from 1802 to 1854, with an estimated loss of 5,000,000 lives; and from 1860 to 1879 there were 16 famines, with a loss of more than 12,000,000 lives. This increase is not due to the fact of decreased production so much as to the draining of the resources of the country by taxes. The Government maintains a famine insurance, but from time to time the fund is diverted for military defense on the frontiers, and it has been used in the construction of railroads, which, by bringing in foreign products, discourage native industries and add to the poverty of the people. The irrigation system begun after the famine of 1877 was not completed, and in the drought of 1896 all crops failed. In June, 1897, more than 4,500,000 persons were receiving relief. Large sums were subscribed in Great Britain, the United States, France, Germany, and other countries; the charitable contributions from all sources amounted to nearly £1,750,000. After the drought came the bubonic plague, which broke out in Bombay and spread to other places. The deaths in the Bombay presidency rose to 4,300 a week in October, 1898.

Trouble with Japan.—In 1862 a British subject was murdered in Japan on a road the freedom of which was granted to Englishmen by treaty; the murder was committed by some of the adherents of Prince Satsuma. The Japanese Government was called upon for an indemnity of £100,000, which was paid; and demand was made on Satsuma for £25,000 and punishment of the murderers; he did not respond, and an English fleet under Admiral Kuper went to his capital, Kagosima, to demand reparation. The forts fired upon him, and he bombarded the town, destroying the greater part of it, after which Satsuma yielded.

Insurrections in New Zealand.—The Maoris have from time to time risen against British rule. An insurrection in 1843-'47 was not so serious as one that took place in Lord Palmerston's second administration. The Maoris resented the intrusion of the colonists on lands they regarded as their own, and they fought surprisingly well. In August, 1864, they were subdued, and submitted. There were other outbreaks in 1868 and 1869.

The Rebellion in Jamaica.—The slaves in Jamaica had been freed in 1834, and were afterward apprenticed as laborers. This system was abolished in 1836, as it was shown to be little less oppressive than slavery. In 1839 a motion to suspend the Constitution of the island for five years in consequence of continual disagreements between the Assembly and the home Government came so near to failure that it led to the resignation of the Melbourne ministry, though, in consequence of the Bedchamber Plot (noticed on page 737, this article), they returned to power directly after, and a milder bill was passed. In 1865 an insurrection broke out in the island which was so quickly suppressed that it would scarcely have raised a ripple in England but for the severity with which the participants and those suspected of participation had been punished after the rebellion was over. Edward John Eyre was then Governor of the island. The insurrection, which was little more than a series of riots, was brought about by an attempt to evict some negroes from land which they had improved under a promise that if they would pay the arrears of quitrent due the Crown

they might have the lands rent free. After order was restored a member of the Assembly, against whom no participation in the insurrection was shown, was condemned by an illegal court-martial and hanged because he was believed to have encouraged the blacks by his sympathy and championship whenever their rights were supposed to be in danger. Then, by order of the Governor, homes were burned, men and women to the number of more than 600 were flogged, many under circumstances of hideous cruelty, and 439 persons were executed. Property of the families of some who had been executed was confiscated. The cruelty and injustice of the punishment were strongly condemned in England, though there was a party which maintained that Gov. Eyre was justified. That party was led by Thomas Carlyle—naturally enough, for he had been one of the loudest supporters of the party of slavery in this country, declaring that "the Almighty Maker appointed the nigger to be a servant." He praised Eyre as "a just, humane, and valiant man, faithful to his trusts everywhere, and with no ordinary facility of executing them," and declared that he merited "honor, thanks, and wise imitation (I will further say) should similar emergencies arise, on the great scale or on the small, in whatever we are governing." Much more surprising are some other names that appear on the same side with Carlyle's. John Ruskin headed the subscription to the defense fund for Eyre with £100, explaining that he was able to do it by the sacrifice of an intended journey to Switzerland, partly for his health and partly to complete some notes on the geology of the great northern Swiss valley. Charles and Henry Kingsley, Tennyson, Sir Roderick Murchison, the Earl of Shrewsbury, Tyndall, and Earl Manners also contributed to the fund, and the sympathies of Dickens were on the same side. Active on the committee that undertook the duty of prosecuting Eyre and his associates after the Government declined it were John Stuart Mill, John Bright, Thomas Hughes, Goldwin Smith, Herbert Spencer, Frederic Harrison, Francis W. Newman, Thorold Rogers, Prof. Fawcett, Sir Wilfrid Lawson, and others. Carlyle denounced their action as "un-English and disgraceful," and Ruskin said he was "glad to make any sacrifice to show his much more than disrespect for the Jamaica committee." Finally, in 1872, the Government paid the expenses of Eyre in the prosecutions the committee had brought against him; all the indictments had been thrown out by the grand juries, though the report of the commission of investigation had condemned the punishments as excessive, barbarous, wanton, and cruel. The representative assembly of the island was then abolished, and the government administered by an appointed governor and council.

War with Abyssinia.—This took place in 1868. A British consul at Massowah, an island in the Red Sea belonging to Turkey, who was appointed in 1848, became a great friend of Theodore, King of Abyssinia, and helped him to quell an insurrection among his subjects, in the course of which the consul was killed. His successor, Mr. Cameron, was warned that his service was not due to Abyssinia. Theodore suspected him of a secret understanding with Egypt, and regarded the attitude of England as unfriendly. He wrote to the Queen asking aid against Egypt, but received no answer. There was even a story that he aspired to marry the Queen, and that as he boasted descent from the Queen of Sheba he did not think his aspirations presumptuous. There does not appear to be any record of such proposals, but for some reason he felt resentful toward the

English, and he took Capt. Cameron and other British subjects and held them prisoners; demands for their release were disregarded, and Sir Robert Napier was ordered to go against him with a force from Bombay. After a difficult march through a mountainous country they reached the capital, Magdala. The natives fought well, but were beaten. Theodore offered to treat, and sent the captives to Napier. The English general would hear of nothing but unconditional surrender; Theodore would not surrender, and his rock-built capital was carried by assault. He was found just within the gate, having died by his own hand. Magdala was destroyed lest it should be used as a stronghold by a fierce tribe of Mohammedans in that region. Sir Robert was made Baron Napier of Magdala, in recognition of his service.

The Treaty of Berlin.—In 1875 an insurrection broke out in Bosnia and Herzegovina against the Turkish Government, which spread rapidly and received aid from Servia and Montenegro. The Turkish Government appealed to England to prevent assistance from being given to the insurgents from surrounding countries. A note drawn up by Count Andrassy, the Austrian minister, called after his name, became quite famous in the history of the negotiations entered into for the purpose of adjusting the difficulty. In this note Austria, Russia, and Germany joined in declaring that the Turkish Government had failed to carry out its promised reforms, and that the other powers would insist upon immediate fulfillment of them. The note was signed by France and Italy, but not by England until a request came from the Porte that England should sign. Upon receipt of the note promises of immediate action upon the reforms were made, but nothing was done. Then the three powers that had first united in the note drew up what was called the Berlin Memorandum, giving Turkey to understand that force would be used unless the reforms were at once instituted, but England refused to join with them, and the memorandum was not sent. Following this were outbreaks in Turkey; a Mohammedan mob murdered the French and German consuls at Salonica; the Sultan was deposed and committed suicide; his nephew, who succeeded, was deposed three months later and his brother enthroned in his place. Then an insurrection broke out in Bulgaria, and the Turkish troops sent there not only put down the revolt, but proceeded to wholesale massacre of men, women, and children. In the district of Philippopolis 12,000 were killed. The whole civilized world was stirred by the accounts of the "Bulgarian atrocities," as it was in later years by the Armenian massacres. The indignation in England was intense. Mr. Gladstone led in denunciation of the Turkish Government and the policy of allowing such a power to tyrannize over the Christians in the provinces. But the humanitarian sentiment that called for immediate interference was checked by the chronic dread of Russian aggression. So there came to be a distinct division of sentiment between those who held that Turkey must be sustained as a barrier against Russia and those who believed that the Turk should no longer be allowed to control Christian peoples, since all his promises of reforms had been proved worthless. A conference of the powers at Constantinople effected nothing. In April, 1877, Russia declared war against Turkey, and after some repulses secured victories that seemed to mean final success.

A large party in England was for war. It was at this time that the word *jingo* came into use as a name for those eager for an aggressive foreign policy. It was taken from the refrain of a song popular in the music halls:

"We don't want to fight, but, by jingo, if we do, We've got the ships, we've got the men, we've got the money, too."

The fleet was ordered to the Dardanelles, but recalled on account of the Liberal opposition and the unwillingness of some members of the Cabinet to be responsible for war. Before further war measures were taken Turkey had yielded, agreed to an armistice and the treaty of San Stefano, which granted independence to Bulgaria and made the other Christian provinces almost independent. Preparations for war against Russia now went on in England, which would not consent to the treaty or allow Russia to dictate terms to Turkey. Lord Derby, the Foreign Secretary in Lord Beaconsfield's Cabinet, resigned—he had been for preserving peace—and Lord Salisbury took his place. War now seemed certain, but Prince Bismarck came forward with a proposal for a congress in Berlin, to discuss the treaty of San Stefano. Lord Beaconsfield and Lord Salisbury represented England. The result was the Treaty of Berlin. Lord Beaconsfield came home in triumph, bringing the island of Cyprus, the price Turkey paid for England's guarantee that she should be left in possession of her territory in Asia. To the crowds that gathered to hear him speak he proclaimed that he had brought home "peace with honor," a phrase that at once became current in England and America. At this time the great Conservative leader touched the highest point of his popularity and Mr. Gladstone his lowest point of unpopularity. Parliament was dissolved in 1880, however; popular feeling had changed; the wars in Asia and Africa were not going well; the elections brought the Liberals back to power with a great majority. The Earl of Beaconsfield died April 19, 1881.

Events in Africa.—British explorers have been very active in Africa during the past half century. In 1849 Dr. Livingstone discovered Lake Ngami, in 1859 Lake Nyassa, and in 1868 Lake Bangweolo; he explored the Zambesi and its tributaries and the Lualaba, and traveled from coast to coast. Capt. Speke discovered Victoria Nyanza in 1858, and the same year, in company with Burton, Lake Tanganyika; and Sir Samuel Baker found Albert Nyanza in 1864; others have followed and filled out the map of Africa in connection with the explorers of other nations. Colonies have been planted and the lines of British protectorates and spheres of influence extended in eastern, western, and southern Africa.

The colonies in West Africa have given trouble from time to time during the reign. In 1863 an expedition sent against the warlike Ashantis had to return on account of the deadly climate. In 1872, after some Dutch possessions had been gained by England through purchase and exchange, the King of the Ashantis refused to evacuate the territory, claiming that tribute was due to him. Sir Garnet Wolseley was sent against him with a force in 1873, defeated him, burned his capital, Kumassi, and forced him to accept the terms of England, which included the prohibition of human sacrifices. In 1895 another expedition was sent against the then King of Ashanti, or of the part that was left of it, Prempeh, who had refused to accept a British resident and had proposed to send envoys to England, refusing to treat with the Governor of the Gold Coast. An ultimatum was sent to him, demanding that slave catching and human sacrifice should be stopped. Denying charges of these things, he talked defiantly, but yielded without resistance when the English reached Kumassi. Lagos was taken in 1851 and formally ceded in 1861, and other adjacent territory has been since annexed.

The British possessions in South Africa were greatly extended during the reign; Natal was added in 1842; British Kaffraria, taken about 1848, was added to Cape Colony in 1866; Basutoland in 1868; Griqualand West in 1872; Griqualand East and neighboring territory in 1874-'75. The Transvaal was annexed in 1877, but restored to the Boers under British suzerainty in 1881.

There were wars with the Kaffirs in 1846 and in 1851-'52, with the Galekas and Gaikas in 1877-'78, and with the Basutos in 1880-'81. Of the wars with native tribes, the most important was that made on the Zulus, about 1879. Under their King, Cetewayo, they seem to have been friendly to the English; but some trouble having arisen with the colonists, arbitrators were appointed who decided that certain disputed territory claimed by the Zulus was theirs by right. But Sir Bartle Frere was made Lord High Commissioner, and he seems to have avoided a settlement with the intention of bringing the Zulu territory under British rule. However this may be, the war was regarded in England as unnecessary. The English army sustained a complete and sudden defeat at Isandlwana, Jan. 22, 1879. The loss was given as 30 officers and 500 men of the imperial troops and 70 men of the colonials, together with the whole train of supplies. There was another serious reverse March 12. In July the Zulus were completely defeated at Ulundi, where they met a loss estimated at 800 to 1,500, while the British lost 10 killed and 53 wounded. Cetewayo was captured in August. Zululand was apportioned among 13 chiefs, but some of them proved to be cruel oppressors, and at length, in 1882, in accordance with the wish of the Zulus and on the recommendation of Bishop Colenso of Natal, Cetewayo was restored under conditions. He was taken to London first, with a view to impressing him with the strength and glory of the English nation. In 1883 he attempted to regain his former sovereignty over territory that had been assigned to another chief. He was wounded, and afterward kept prisoner till his death, in 1884.

An incident of the Zulu War was the death of the prince imperial of France, the only son of Napoleon III and the Empress Eugenie. He had gone out with a reconnoitering party; they were surprised by the enemy, who killed the prince and two troopers with their assegais. The English Government was assailed for having accepted his services, but it was found that the prince had wished to serve in the army, and had been refused by the home authorities, but allowed to go out upon his own account to see something of war, which he was very anxious to do.

The troubles with the Boers of the Transvaal, the aggressions upon their territory, the annexation, the war of 1880-'81, culminating in the defeat of the British army at Majuba Hill—when the British commander, Sir George Pomeroy Colley, who was the Lord High Commissioner for South-east Africa, was slain, with 82 others, and 184 were wounded or captured—and the terms of settlement afterward, have been so exhaustively reviewed during the recent South African War that it is unnecessary to enter into them here. They are given in detail in the articles on CAPE COLONY and SOUTH AFRICA in former volumes of the *Annual Cyclopædia*. The incidents of the Jameson raid in 1896 and of the war with the Boers which is still in progress are fresh in memory, and need scarcely be alluded to.

About 1839 the Pasha of Egypt, who had conquered Syria, turned his arms against the Sultan, whereupon the English and Austrians went to the rescue of the Turks, bombarded Acire, and forced

the rebellious Pasha to yield. A treaty was signed in 1841 which left him his Egyptian, but took away his Syrian possessions. In 1875 the Government bought the shares of the Khedive of Egypt in the Suez Canal, and Parliament voted £4,080,000 to pay for them. The measure was opposed by Mr. Gladstone and others of the Opposition. The Government explained that they had negotiated the purchase, not as a financial investment, but as a political move for the purpose of strengthening the empire. In 1876 France and England interposed to secure the payment of the debts that had been incurred by the Khedive, Ismail, the interest on the bonds not having been met. The expenditures were placed under the supervision of French and English comptrollers. In 1880 an international Commission of Liquidation was appointed. The debt amounted to about \$500,000,000. The loans had been negotiated with English and French banking houses at from 7 to 9 per cent. interest, yet the Khedive had actually received only about 50 per cent. of the nominal loans, the rest having gone in bankers' commissions and the discount at which they were taken. The annual interest and sinking-fund charges on the nearly £33,000,000 owing in 1870 were about 12 per cent. Crops were pledged in advance and interest mounted; the miserable ruler had to pay as high as 28 per cent. for advances from the Anglo-Egyptian Bank. The poor Egyptians were robbed on every hand. A proposal to reduce the land tax so that the people might live was rejected on behalf of the bondholders. In February, 1879, the unpaid army officers had mutinied. The Khedive dismissed the European ministers, fearing, as he said, a massacre. The English and French governments retaliated by compelling the Sultan to depose him and appoint his son Tewfik to be Khedive in his place. In 1880 the floating debt was converted into bonds, the whole amounting to £105,876,630. The Khedive had used the borrowed money largely on public works, the Suez Canal, the Nile canals, bridges, mills, docks, harbor improvements, lighthouses, waterworks, railroads, and telegraphs; he established public schools and built opera houses and palaces.

The salaries paid to foreign officials was one source of discontent to the Egyptians. From a report made in 1882 it appeared that the total annual salaries to foreigners in public office was 373,491 Egyptian pounds, and this and other grievances gave rise to the so-called National party. It did not seek to deny the obligation of the debt, but complained of the employment of foreigners at great salaries for work the natives would have been glad to do for small ones; of the exemption from taxation of the fine dwellings of Europeans while the poor huts of their neighbors paid 12 per cent. on their valuation.

An attempt at a constitutional government was made, but the Assembly and the Khedive with his counselors were at odds. The French and English sent squadrons to make a naval demonstration, to fortify the authority of the Khedive, which anchored in the harbor of Alexandria. Arabi Pasha, who stood for the National party, was Minister of War. He was forced from the Cabinet, but the Khedive was afterward compelled to reinstate him.

The powers interposed, and it is possible that arrangements might have been made by which the worst abuses complained of would have been done away with, but the resentment of the long-suffering people broke out in a riot in Alexandria. An Arab was stabbed in a fight by a Maltese; the Arabs gathered in mobs and set upon the Europeans, of whom about 70 were killed, while the

number of slain Arabs amounted to over 600. The Europeans fled. The army took possession. The fact that the Egyptian soldiers were throwing up earthworks and mounting guns was made the occasion for action on the part of the British squadron in the harbor, and the city was bombarded July 11, 1882. There was great loss of life among the Egyptians, but the British lost only 6 killed and 28 wounded. Arabi Pasha was expelled from his office as Minister of War and treated as a rebel, but he continued the hero of the army and the people.

A conference of representatives of the powers had been going on for some time, but England continued with preparations for war, and sent out a force under Sir Garnet Wolseley, who arrived Aug. 15. In a month the Egyptians were completely defeated. Arabi and two of his colleagues were sentenced to death as rebels, but the sentence was commuted to perpetual banishment. The army of Egypt was reorganized under a British officer.

The rebellion in the Soudan under the leadership of Mohammed Achmed, known as "the Mahdi," began about 1881. In November, 1883, an Egyptian army under Hicks Pasha was defeated near El Obeid and completely annihilated; not a single European came away alive. Again in February, 1884, Gen. Baker's Egyptian force, marching from Trinkitat to Tokar to relieve the beleaguered garrison there, was attacked near Suakim by a detachment of Osman Digma's Arabs, defeated with scarcely any resistance, and utterly annihilated as a military force, with the loss of nearly two thirds of its numbers. Meantime Gen. C. G. Gordon, known as "Chinese Gordon," had been sent to the Soudan, to report on the military situation there, to take measures for the security of the Egyptian garrisons and the safety of Europeans in Khartoum; also to consider what steps could be taken "to counteract the stimulus which it is feared may possibly be given to the slave trade by the present insurrectionary movements." On the advice of the British Government, Egypt had agreed to give up her possessions in the Soudan except those bordering the Red Sea, and Gen. Gordon was to arrange for the evacuation by the Egyptian troops in the interior, and the restoration of their ancestral powers to the chiefs who had been suspended from them during the Egyptian occupation.

His task of pacifying the Soudan was complicated rather than forwarded by the campaign of Gen. Graham against Osman Digma, in which the Arabs were defeated at El Teb and Tamanieb. Then Berber was taken by the rebels, who were again repulsed at Dongola.

The siege of Khartoum began about March, 1884, but Gen. Gordon found means to send dispatches, in which he asked for help and re-enforcements, which he did not receive. After that the town was so closely invested that it was difficult to send dispatches: the siege was maintained for seven months, all the dispatches received during the time showing the desperate need of assistance. This seems to have been delayed because the Government believed that he was not in accord with their policy for evacuating the Soudan. They were severely criticised for their inaction, and have since been held responsible for the sacrifice of Gen. Gordon. The truth seems to be that Mr. Gladstone's Government were not in accord with the general policy of England, which was particularly tangled in regard to the affairs of Egypt. Mr. Gladstone did not recognize the right of the Anglo-Egyptian Government over the Soudanese apparently, and it is possible that Gen. Gordon's proclamation at the beginning of his Khartoum experience that he

would not interfere with the slave trade indicated to the Government that he did not intend to carry out his instructions.

At length, in August, a relief expedition was planned, and reached Egypt, under Lord Wolseley, Sept. 9; but it was a long time before they arrived at the scene of action. An advance body under Gen. Stewart was attacked, Jan. 17 and 19, 1885, and suffered terrible loss. Gen. Stewart was killed, and the force went on under command of Sir Charles Wilson, who came in sight of Khartoum Jan. 28. The flagstaff still stood on the Government house, but Gen. Gordon's flag was gone. Sir Charles therefore returned without going to Khartoum; he was told that the place had fallen through treachery, and that Gordon had been killed. The Mahdi was reported to have died the following June. Subsequent reports showed that there was great suffering during the siege from famine, and that the fall of the city was followed by horrible scenes of pillage and murder. The English expedition, having failed in its mission, was withdrawn. The disorders in the Soudan continued, and it was not until 1899 that the power of Mahdism was finally broken by the defeat of the Arab forces by the army under Lord Kitchener at Omdurman.

Gradually the finances of Egypt have been placed on a better basis, judicial and other reforms have been introduced, and some engineering works of great benefit to the country have been undertaken, and in part carried out.

Affairs of Ireland.—In 1838 the collection of tithes in Ireland, which had been a fruitful source of discontent and had led to frequent severities on the part of the authorities and almost ceaseless struggles on the part of the people, was at length abolished and a tax upon the land was substituted. Daniel O'Connell was the leader of a movement for the repeal of the act of union between Great Britain and Ireland. Great mass meetings were held at various places. "The year 1843," said O'Connell, "is and shall be the great repeal year." A meeting intended to surpass all previous gatherings was appointed to take place at Clontarf, near Dublin, Oct. 8, 1843. The Lord Lieutenant forbade the meeting. O'Connell, who was opposed to violence, yielded, much to the disgust of those of his followers who were prepared to go to greater lengths and make the movement something more than a peaceable protest. O'Connell and some other leaders were tried and found guilty of conspiring to excite disaffection. They were sentenced to imprisonment for a year, and heavy fines were imposed upon several of them. The sentence was not carried out, the House of Lords, on appeal, having reversed the judgment; but the repeal agitation was ended.

The failure of the potato crop in 1845-'46 brought on the great famine in Ireland, in consequence of which the population was reduced by starvation and emigration by about 2,000,000, and the country received a blow from which it never has recovered. It is doubtful if the repeal of the corn laws, which was hastened by the supposed necessity for opening the ports to foreign grain as a relief measure, did not really militate against the prosperity of Ireland, since it was and is mainly an agricultural country, and the protection afforded by the corn laws formed something of an offset to the other disadvantages under which it labored. Be that as it may, some excesses and outbreaks took place about this time, so that Sir Robert Peel thought it necessary to propose another coercion act at the time when the free-trade bill was before Parliament. The latter passed, but the protectionists joined with the Irish party and

the Radicals against the coercion bill; the minister was defeated, and three days later resigned his office and was succeeded by Lord John Russell.

The awful disaster in Ireland—famine and the diseases that came in its train—naturally disturbed the quiet of the country, and the old device of coercion measures was resorted to. The Young Ireland party, which had been in existence for some years, came forward in 1848, and under the leadership of John Mitchel, who edited the *United Irishman*, attempted to raise an insurrection. The Government brought in a bill, which was passed, making it a felony, punishable with transportation, to publish any incitement to insurrection or to offer any resistance to the enforcement of law. Under its provisions Mitchel was arrested and his paper suppressed. He was tried, convicted, and sentenced to fourteen years' transportation. The habeas corpus act was suspended in Ireland; warrants were issued for the arrest of other leaders; they came into collision with the police at Ballingarry, in Tipperary, where, after a slight resistance, they were arrested. They were tried before a special commission; Smith O'Brien and Thomas F. Meagher were sentenced to be hanged, beheaded, and quartered, the punishment for high treason, but the sentence was commuted to imprisonment for life, and all the convicts were transported to Australia.

The Fenian uprising in 1866 was the next chapter in the revolt of Ireland against English rule. The invasion of Canada from the United States was checked by our Government. In March, 1867, a general uprising in Ireland was planned; but a heavy snowstorm interfered with the gatherings of the people, and the attempt failed. A scheme to seize Chester Castle, take possession of the arms there, and invade Ireland with such steamers as could be taken in the port had been betrayed, and the fiasco in Ireland ended the struggle. Large numbers of men were arrested and sentenced to prison. Three men who tried to rescue some prisoners in Manchester were hanged—a policeman having been killed during the attempt—though John Bright and John Stuart Mill, with others, tried hard to save their lives. Another man was hanged for an attempt to blow up Clerkenwell prison for the rescue of some Fenians. The crime failed of its object, but some innocent persons were killed. The habeas corpus act was suspended in Ireland till March 1, 1869. The Fenians made two other feeble attempts upon Canada, and then the movement went to pieces.

One great source of the misery of Ireland and the discontent there was the tenure by which land was held. Farming was the only dependence of the peasantry. The land was owned largely by absentee landlords, who employed agents to collect the rents, and the agents were expected to wring from the tenants the very utmost possible. Hence the rack-rent, and when it failed the eviction. If a tenant improved his land or buildings, the result was that he must pay a higher rent or give up the holding to a tenant who would bid more, and there was no redress. "The greatest concession," says a historian of Ireland, "that Government made for many generations to the misery of the Irish tenant was to pass an act prohibiting evictions on Christmas Day and Good Friday, and enacting that the roof of a tenant's house should not be pulled off until the inmates had left." He says again that from 1829 to 1880 "the country has been governed by the ordinary law for scarcely a single year. Arms acts, suspension of habeas corpus, changes of venue, peace preservation acts, and coercive measures of all kinds succeed, accompany, and overlap each other with melancholy per-

sistence. Roughly speaking, Ireland, from the union to 1880, was never governed by the ordinary law. The union, according to its advocates, was to be the bond of peace and lasting affection between the two countries; it was followed by eighty years of coercive legislation."

The home-rule movement began quietly about 1870, and in 1874 was made an issue at some of the elections—about 60 Irish members being returned as pledged to it. What they asked was an Irish parliament to deal with affairs concerning Ireland only. Mr. Parnell entered Parliament in 1875, and became the leader of the home-rule party, of which Mr. Isaac Butt had been, if not the originator, an active member. A rather ineffective land act had been passed in 1870; the demand now came to be for three things which were called the three F's—fair rent, fixity of tenure, free sale.

About this time (1876-79) Ireland was threatened through three poor harvests with another famine. Mr. Parnell was joined by other energetic Irish patriots, who organized the great association known as the Land League. Its object was to change the system of land tenure, to abolish landlordism, and enable the peasant to own the land he tilled. There were 1,200 evictions in 1876, over 1,300 in 1877, over 1,700 in 1878, and nearly 4,000 in 1879. Mr. Parnell came to America to raise money for the sufferers, and went back with nearly \$250,000 for that purpose, besides a large amount for carrying on the work of the Land League. A bill for compensating evicted tenants passed the Commons, but failed in the House of Lords.

The Conservative Government went out in 1880, and Mr. Gladstone's ministry came in. It was expected that the Government and the Irish party would work together, but the expectation was disappointed. The Government would not go as far as the Land League desired. The Irish people were advised to refuse to pay rent above a certain valuation, and to refuse dealings with rack-renters and evicting landlords and agents. This form of warfare took the name boycotting—Boycott being the name of the first man against whom it was used. All violence was steadily discouraged by the leaders, but the advice was not always followed by the starving evicted peasants.

The breach between the Government and the Irish party came to a head when the Government brought in a coercion bill; the Irish members resorted to obstruction tactics until the Speaker forbade further debate. The arrest of Michael Davitt just after this was the occasion of the expulsion of a large number of Irish members—36, it is said—who tried to speak against it in the Commons.

Even Mr. Bright was now against the Irish party, and the proposed coercion act was carried. A land act also was passed. It created a land court or courts, to which a tenant might appeal if he thought the landlord fixed his rent too high. This was much criticised, but it has been productive of great good in bringing relief to tenants from exorbitant demands. Mr. Parnell and the other leaders thought it did not go far enough. They advised that no appeals be taken to the land court till after they had been approved by the Land League authorities. Mr. Gladstone had five of them arrested for defiance of law and sent to Kilmainham jail. They put out a manifesto advising tenants to pay no rent till they were released and constitutional rights restored. Crime increased under what Mr. Bright had called "the ever poisonous remedy of coercion." The historian says: "Ministerialists argued that within ten months the mutilation of animals in Ireland had

increased to 47, therefore the liberties of a nation of 5,000,000 should be suspended. They forgot that in the same ten months of the same year there was a total of 3,489 convictions in England for cruelty to animals, many cases of which were of the most horrible kind."

Then, while still the prisoners were at Kilmainham jail, a peace was concluded between them and the Liberals. The agreement was called the Kilmainham treaty. Parnell agreed to act with the Liberal party if provision were made for canceling the arrears of rent that had accumulated against the smaller tenantry, and the coercion act abandoned. It was abandoned, and the prisoners were released.

On May 6, 1882, occurred the horrible crime in Phoenix Park, Dublin—the murder of the Chief Secretary for Ireland, Lord Frederick Cavendish, and the Undersecretary, Mr. Burke. This was a blow to the cause of Ireland. The arrears bill was passed, the franchise was extended to every householder in Ireland, and a land-purchase bill was prepared but not carried through on account of the fall of the Gladstone ministry. The Land League, which had been suppressed, was revived under the name National League. When Mr. Gladstone became Premier again in 1886 he presented a home-rule bill which had the support of the Irish members, but divided his own party and led to another change of ministry. The scandal against Mr. Parnell led to a division in the Irish party in 1890, and a bitter fight ensued between his partisans and those who believed that his continued leadership would be damaging to the cause.

Under the Salisbury ministry another great step was taken recently toward good government by the establishment of a system of local legislation and administration, to take the place of the old scheme of executive control of the affairs of communities through grand juries.

The Australian Federation.—The Australian colonies act was passed in 1850 for the better administration of the Government there. It gave the colonies of New South Wales, Victoria, Van Diemen's Land, and South Australia representative government. Other colonies have been established from time to time and made mainly self-governing. In recent years the colonies have been taking steps toward a federation; the question was submitted to a referendum in the various colonies, and in January, 1899, the premiers met in a new Federal Council to recast the commonwealth bill that was ratified in 1898 in Victoria, Tasmania, and South Australia; and the amended scheme of federation was accepted by five of the colonies.

Relations with the United States.—In the early years of the reign there were several causes of friction between England and the United States. One difficulty arose out of the arrest in New York of a Canadian who had killed an American in the fray over the destruction of the Caroline, a steamboat fitted out on the American side of the Niagara for use by the rebels, but which was fired and sent over the falls by loyal Canadians. This was settled when, after the British Government had declared the raid to have been a public act, the Canadian was released. Another complication was caused by the question of the right of search for impressing British seamen and suppressing the slave trade. The Creole, a slave ship, had been taken into an English port in the West Indies by the negroes who had mutinied; the authorities had refused to assist the crew, and the negroes had gone free. The northeastern boundary was still unsettled. In 1842 Lord Ashburton, who was known to be friendly to the United States, was sent over as commissioner, and he concluded

with Daniel Webster, then Secretary of State, the treaty that bears his name. The boundary defined by the treaty was regarded as fair to both countries, the United States undertaking to indemnify the States that suffered loss by it, while others gained. The treaty also included a "cruising convention," a clause stipulating that the squadrons on the coast of Africa, while each enforcing the laws of its own nation, should work in co-operation. The cases of the *Caroline* and the *Creole* were disposed of in the treaty; it was made clear that England was not expected to return fugitive slaves, but the extradition of criminals was provided for; in the case of the *Creole* the United States had demanded the surrender of the negroes as mutineers and murderers. The right of impressment was not touched in the treaty, but Mr. Webster wrote a letter to Lord Ashburton, in which he declared that the crews of American merchant vessels would be protected by the flag over them. Thus a war that seemed impending was averted, though the terms of the treaty were violently attacked in Parliament and in the Senate before it was finally ratified.

The northwestern boundary still remained unsettled. The extreme claim of Great Britain was for the line of Columbia river, beginning where it crosses the forty-ninth parallel. The extreme American claim was for the line $54^{\circ} 40'$, which was the original claim of Spain. This gave rise to the party cry, "Fifty-four-forty or fight!" But the forty-ninth parallel had been proposed on the part of the United States as a compromise. A treaty was concluded June 15, 1846, between Mr. Packenham for England and Mr. Buchanan for the United States, giving Vancouver Island to Great Britain. The interpretation of some parts of the treaty, which was drawn up in England, was found obscure and was not settled till 1871, when it was referred to the Emperor William for arbitration. The island San Juan de Fuca he decided to belong to the United States.

In 1850 was concluded the celebrated Clayton-Bulwer treaty in regard to a ship canal between the Atlantic and Pacific, by which its neutrality was guaranteed, and each nation bound itself not to obtain or keep exclusive control of the canal, not to construct or occupy any fortifications in its vicinity, or to make alliance with any state for the purpose of having such fortifications made; not to colonize or assume any dominion over any part of Central America; and not to take for its citizens any rights or advantages of commerce or navigation not accorded on the same terms to the citizens of the other.

Treaties for the suppression of the African slave trade were made from time to time, for extradition, and in regard to naturalization and renunciation of citizenship.

At the close of 1854 a little flurry of disagreement arose over enlistments under the foreign enlistment act, authorizing the raising of a foreign legion for service in the Crimean War, and the English minister was sent away from Washington. England apologized, and diplomatic relations were restored.

The most serious difficulties arose in connection with the war of secession. On the sentiment in England at that time it is best to quote an English historian. Justin McCarthy says in his *History of Our Own Times*: "The Southern scheme found support only in England and France. In all other European countries the sympathy of people and government alike went with the North. . . . Yet in France the people in general were on the side of the North. Only the Emperor and the Government were on that of the South. In Eng-

land, on the other hand, the vast majority of what are called the influential classes came to be heart and soul with the South, and strove to bring or force the Government to the same side."

On May 8, 1861, it was announced in the House of Commons that the Government were of opinion that the Confederacy must be recognized as a belligerent power; on May 13 a proclamation of neutrality was issued, warning all British subjects against giving aid in any way to either side. On Nov. 8 occurred the affair of the *Trent*, which caused intense feeling on both sides the Atlantic. Mr. Mason and Mr. Slidell, sent as envoys of the Confederacy to England and France respectively, escaped from Charleston to Havana, where they embarked in the English mail steamer *Trent* for Southampton. The *Trent* was intercepted by Capt. Wilkes in the United States sloop of war *San Jacinto*, and the envoys were seized and carried to New York. The United States Government did not sustain Capt. Wilkes, though popular feeling throughout the country was with him. On demand of the English Government the envoys were released, and the action of the authorities commended itself to the second thought of the American people, when they read Secretary Seward's masterly explanation of the case, in which he showed that the English Government now for the first time stood on a principle for which the United States Government had always contended.

Far more serious was the trouble about the building of Confederate privateers in Great Britain. The *Florida*, first known as the *Oreto*, was built at Birkenhead under the pretense of being designed for the Italian Government, and was allowed to sail, although the American minister, Mr. Adams, had warned the British Government of her real destination. She captured 15 vessels within three months. The *Alabama*, built also at Birkenhead, was launched in May, 1862, as the "290," or the *Enrica*, under pretense of a trial trip, while the American minister was vainly trying to arouse the English authorities to enforcement of international law; and her builders immediately began work on two rams ordered by the Confederate Government, but ostensibly built for French owners. Great Britain was indeed becoming "the naval base of the Confederacy." The Government did not interfere until the rams were ready for starting, when, on Sept. 5, 1863, Mr. Adams sent a last dispatch on the subject to Earl Russell, then in Scotland, containing the sentence since become famous, "It would be superfluous in me to point out to your lordship that this is war." On the 8th it was announced that orders had been given to prevent their departure. In June of this same year Mr. John Arthur Roebuck made a motion in the Commons that the Government be instructed "to enter into negotiations with the great powers of Europe for the purpose of obtaining their co-operation in the recognition" of the Confederacy, and made a speech in favor of it, in which he quoted an interview he had had with Napoleon III, who was most eager to unite with England in recognition; but this was very ill advised and set the house against him, although the majority was strongly inclined toward the South. Mr. Bright answered him in an eloquent speech, and his motion was withdrawn, though not until after news had reached England of the fall of Vicksburg and the National victory at Gettysburg.

No more Confederate ships were built in England, and the question of claims against the Government for the damage done was allowed to rest for the time being. In 1868 it was taken up, and a convention was entered into by representatives

of the governments which was rejected by the United States Senate. Later commissions from the two countries met at Washington, where it was announced that "her Britannic Majesty has authorized her high commissioners and plenipotentiaries to express in a friendly spirit the regret felt by her Majesty's Government for the escape, under whatever circumstances, of the Alabama and other vessels from British ports, and for the depredations committed by these vessels." After laying down some rules in regard to neutrals, the treaty provided for the settlement of the Alabama claims by five arbitrators, to meet at Geneva and to be appointed by the Queen, the President, the Emperor of Brazil, the King of Italy, and the President of the Swiss Confederation. It provided also for a tribunal to settle individual claims between the countries, and a commission to take up the fisheries question; and referred the dispute about the Oregon boundary to the German Emperor. When the arbitrators met they refused to allow all the American claims, and those for indirect losses, which were immense and which raised a storm of indignation in England, were withdrawn. But by unanimous vote England was held responsible for the acts of the Alabama, and a majority found her responsible for those of the Florida and some of those of the Shenandoah. The award was \$15,500,000, and all claims of citizens were disallowed. On the other hand, Great Britain received an award of \$5,500,000 in gold on account of the Canadian fisheries claims.

The trouble about the taking of fur seals in Bering Sea by Canadians and the claim of the United States to exclusive jurisdiction there as coming with the purchase of Alaska from Russia began as far back as 1872, but the United States did not attempt to enforce its rights till 1886, when some schooners belonging to a large fleet from British Columbia were seized and taken to Sitka; but on protest of the British minister the President ordered them to be released, without conclusion of the questions involved. Others were taken in 1887. At the request of the United States the governments interested entered into negotiations in 1888, which were not concluded. Other seizures were made and diplomatic controversy went on till 1892, when, at Secretary Blaine's suggestion, the matter was referred to arbitrators, who met at Paris and delivered a decision contrary to the contention of the United States, Aug. 15, 1893. This made good the claims of the Canadians for damages, and the commission appointed to make the award placed it at \$473,151.26.

The dispute between Great Britain and Venezuela in regard to the boundary between Venezuela and British Guiana came up about 1894. The President sent a warlike message to Congress. In 1895 an extended diplomatic correspondence ensued between the representatives of the two countries which aroused much feeling on both sides of the Atlantic, and war talk was quite current until the matter was referred to a commission.

After gold was discovered in Alaska a boundary controversy arose and commissions were appointed. On Jan. 30, 1897, a treaty was signed providing for the demarcation of as much of the boundary as lies along the one hundred and forty-first meridian.

The Franchise.—The franchise, which had been extended by the reform bill of 1832, was still further extended by a reform bill in 1867. Reform bills had been brought in by Lord Russell without effect in 1852, 1854, and in 1862; and in 1866 Mr. Gladstone introduced one that he had joined with Lord Russell in preparing. On the occasion of the second reading Mr. Disraeli re-

mind Mr. Gladstone of his opposition to the reform bill of 1832, when he was a Conservative. The speech of Mr. Gladstone, who was then Chancellor of the Exchequer under Lord John Russell as Prime Minister, is regarded as among the best of his speeches. In its conclusion he said: "This bill is in a state of crisis and of peril and the Government along with it. . . . We stand with it now; we may fail with it a short time hence. If we do so fall, we, or others in our places, shall rise with it hereafter. . . . At some point of the contest you may possibly succeed. You may drive us from our seats. You may bury the bill that we have introduced, but . . . you can not fight against the future. Time is on our side. The great social forces which move onward in their might and majesty, and which the tumult of our debates does not for a moment impede or disturb—those great social forces are against you; they are marshaled on our side; and the banner which we now carry in this fight, though perhaps at some moment it may droop over our sinking heads, yet it will soon again float in the eye of heaven, and it will be borne by the firm hands of the united people of the three kingdoms, perhaps not to an easy, but to a certain, and a not far distant victory."

The bill failed and the Liberals went out of office; but the next year the Tories brought in a bill for extending the suffrage which went even further than the one of the preceding year, and further still after it had been through the committee and been modified by Liberals and Radicals. Lord Cranborne described it as "a leap in the dark," a phrase ascribed usually to Lord Derby. In 1868 the borough franchise was slightly extended in Ireland.

In 1884 Mr. Gladstone introduced another reform bill, which was carried. It extended the franchise in the counties to the same extent as that in the boroughs. The rural laborers had not theretofore been considered politically; but a movement of organization among them, begun in 1872 under the leadership of Joseph Arch, had drawn attention to the injustice done in leaving them out of the provisions of the former franchise acts.

A measure to introduce voting by ballot was introduced in 1871, but not passed until 1872, when it was carried as an experiment to continue in force till 1880. The property qualification for members of Parliament was abolished about 1858, and about the same time the civil disabilities were removed from Jews, who were allowed thenceforth to omit from the oath "on the true faith of a Christian."

The House of Lords.—The privilege of voting by proxy was given up by the House of Lords in 1868. Later the Crown was given power to create life peerages, a proceeding which had aroused great opposition when it was proposed about 1858 to bestow a life peerage on one of the judges.

Church Affairs.—The early years of the reign saw the so-called "Oxford movement," which culminated in the withdrawal of John Henry Newman and other scholars from the Church of England to that of Rome and the establishment of the Puseyite, or ritualistic, party in the Church. The interest which the movement awakened and the ability of the converts, and the fact that they came from the great university where they were leaders of thought, no doubt led to a belief in Rome that England was on the verge of a great reaction which would carry her back to the ancient communion; and this belief was perhaps the inspiring cause of a papal bull issued in 1850,

directing the establishment of "a hierarchy of bishops deriving their titles from their own sees, which we constitute by the present letter in the various apostolic districts" in England. Cardinal Wiseman, as Archbishop of Westminster and Administrator Apostolic of the diocese of Southwark, was to be the head of the Church in England; and he issued a pastoral, in which he said: "Catholic England has been restored to its orbit in the ecclesiastical firmament from which its light had long vanished, and begins now anew its course of regularly adjusted action around the center of unity, the source of jurisdiction, of light, and of vigor." Lord John Russell wrote a letter to the Bishop of Durham on the subject, in which he condemned the bull as an assumption of authority in England to give titles representing territorial distinctions. The day following the appearance of the letter was Guy Faux day, and instead of the usual effigies of that famous personage effigies of the Pope and the cardinal were burned all through the country. The excitement led to the introduction of Lord John Russell's "ecclesiastical titles" bill, forbidding Catholic prelates to take titles from names of places in the kingdom under penalties. Although the bill was opposed as petty and bigoted not only by all the Catholic members, but by Liberals like Cobden and Bright and many of the other members, it was passed by a vote of 395 to 63, probably with the feeling that something must be done to satisfy the excited feeling in the country. But the act does not seem to have been enforced, and in 1871 it was repealed.

About the time that the Oxford movement was going on in 1843 occurred the secession of the Free Church of Scotland, which was a revolt against the appointment of ministers by lay patrons. It was led by Dr. Thomas Chalmers. In 1874 the bill for the abolition of Church patronage in Scotland was passed, giving the congregations the choice of their ministers, the point for which the Free Church had contended.

The question of disestablishing the Church in Ireland was brought forward in Parliament in 1865 by Mr. Dillwyn, who moved that the position of that establishment was unsatisfactory and called for the early attention of the Government. Mr. Gladstone's speech admitted that the position of the Irish Church was unsatisfactory, as it ministered to only one eighth or one ninth of those who were taxed to support it, but declared that the Government was not able at that time to deal practically with the question. This speech, showing Mr. Gladstone's hostility to the Irish establishment, caused great excitement and drew upon him the censure of the Church party, who believed that his principle, if carried out, would interfere with the Church in Wales, where the dissenters were in a majority, and might even be pushed still further. Nothing more was done at that time, but in 1868 Mr. Gladstone offered a bill abolishing compulsory church rates, which became a law; and in 1869, the bill abolishing the Irish Church establishment, to take effect in 1871, received the royal assent. A bill for disestablishing the Church in Wales was defeated in 1895.

In 1871 the university tests were abolished, thus permitting students of every faith to enter Cambridge and Oxford on equal terms.

A bill for the regulation of public worship was passed in 1874. Its purpose was to do away with ritualism, which has for years been a disturbing element in the Church. The bill has apparently been a failure.

Various Reforms and Improvements.—Many old abuses not mentioned above have been

done away with during the past sixty years. In 1842 an act was passed forbidding the employment of girls and women in mines and collieries. This was in consequence of the report of a commission which had been appointed upon motion of Lord Ashley, afterward Earl of Shaftesbury, that the subject of such labor might be investigated. The report showed that in many of the mines and collieries these poor women had been set to draw carts and carry loads like beasts of burden. Other acts regulating labor and doing away with abuses have been passed from time to time. Formerly the laws against combinations of workmen were very stringent. Any effort to effect an advance in wages was treated as a conspiracy. Trades unions were not regarded as entitled to the protection of the civil laws and could not prosecute a dishonest member or secure themselves against robbery. Their aims were looked upon as destructive to society; strikes were held to be immoral, without regard to their provocation or purpose. Some outrages on the part of trades unions in Sheffield and Manchester about 1868 led to an investigation, which, while it showed that some of them used intimidation and crime to carry out their projects, the majority were innocent of such methods; and the inquiry led to discussion of the laws, and in time to reforms in them, placing the workmen on a better footing in many respects; in the matter of contracts, where the law had been all on the side of the employer, the employee was placed on an equality with him.

The abolition of the duty on paper was an important reform, as it enabled newspapers to be sold much more cheaply, and thus contributed to the spread of intelligence. The price of a daily paper at the beginning of the reign was 6d. Besides the heavy duty on paper there was a stamp duty and a duty on advertisements. All these were in time removed, the last, the duty on paper, about 1860.

In 1840 the uniform penny rate of postage was established. The postal telegraph went into operation about 1868.

In 1857 an act to make the celebrated Gretna Green marriages no longer possible, provided that a residence of at least twenty-one days in Scotland should be required to make marriages legal.

Prince Albert made strenuous efforts to banish the practice of dueling from the army, and it has gradually disappeared.

The purchase system for commissions in the army was abolished under peculiar circumstances. Mr. Gladstone introduced a bill to do away with it and make promotion depend upon merit; the bill also provided for compensation to officers then holding commissions which they had bought and expected to sell again, and which therefore represented an investment, so that the bill would be an act of confiscation virtually without that provision. It passed the Commons, but the Lords attempted to delay and perhaps defeat it entirely. They passed an amendment to the motion for the second reading which was to the effect that it was better not to take any action until a complete plan for the reorganization of the army could be effected. The Prime Minister thereupon devised a plan for defeating the scheme of the Lords. The purchase of commissions was made legal only by royal warrant, and he advised the Queen to issue a royal proclamation canceling the permission which had been given by the warrants of herself and her predecessors. This she did. The House of Lords had then no option but to pass the bill, as that was the only way to save the provision providing for compensation. The action of Mr. Gladstone in thus overriding the legislative power

by royal prerogative was severely criticised, even by a large section of his own party, to whose principles it was clearly opposed. Flogging in the army was abolished in 1879.

In 1868 a bill was passed in Parliament to do away with public executions, which had long been a source of scandal to the better elements of the population; it had come to be understood that they were only a source of hardening and brutalization to the very class they were intended to impress by terrible warning. Transportation for crime came to an end in 1857, and debtors' prisons have been abolished.

Strangely enough, up to the year 1870 England had no system of national education. There were private schools and church schools and charity schools, but no system of free public education; more than two thirds of the children were without school advantages. In 1870, during Mr. Gladstone's first administration, a bill was brought in by Mr. Forster to establish a system of schools, and after much opposition, not perhaps to the establishment of schools, but to some features of the plan, it was carried, and the present system of board schools was instituted; improvements have been made from time to time.

About 1874 the country was stirred by the revelations made by Mr. Plimsoll in Parliament concerning the practice of sending out seamen in merchant vessels which were unseaworthy but insured, so that the owners were indifferent to their fate, while the law allowed seamen who failed to fulfill their agreements to be sent to prison. A sailor, therefore, who found himself committed to sailing in a crazy vessel had the alternative of risking his life or going to prison. Mr. Plimsoll offered a bill for securing close inspection of ships, which was opposed as too stringent by ship-owners and others; a bill affording temporarily a measure of relief was passed in 1875, and in 1876 its provisions with others were embodied in a permanent act, which was passed.

The great advances in the comforts and conveniences of life, the improvements in methods of travel and communication, the multiplication of machinery, the discoveries of science, the new applications of known scientific principles—all these advantages of the wonderful progress of the past sixty years England has shared with all other civilized nations, and they need only be referred to here.

In the year following Victoria's accession steam communication was established between England and America; the *Sirius*, the *Great Western*, and the *Royal William* crossed the Atlantic. The *Cunard* line was established two years later. The same year (1837) that Prof. Morse applied to Congress for aid for his electric telegraph, two Englishmen—Wheatstone and Cooke—took out a patent for improvements "in giving signals and sounding alarms in distant places by means of electric currents transmitted through metallic circuit." The first successful Atlantic cable was laid in 1866; now all the oceans are traversed in this way, the Atlantic by 14 lines.

"In 1837-'38," says Alfred Russel Wallace, "I was living near Leighton Buzzard while the London and Birmingham Railway, the precursor of the present London and Northwestern system, was in process of construction; and when the first section was opened to Watford I traveled by it to London third class in what is now an ordinary goods truck, with neither roof nor seats, nor any other accommodation than is now given to coal, iron, and miscellaneous goods. If it rained or the wind was cold the passengers sat on the floor and protected themselves as they could."

The half-centenary jubilee of the first use of locomotives on the road from Stockton to Darlington in 1825 was celebrated at Darlington in September, 1875, under the auspices of the North-eastern Railway Company. The Liverpool and Manchester line had been opened in 1830; the London and Birmingham was first opened throughout in 1838. The Queen made her first journey by rail from Windsor to Paddington in 1842. The *London Times* says of it: "The master of the horse, whose business it was to provide for the Queen's ordinary journeys by road, was much put out by this innovation. He marched into the station several hours before the start to inspect the engine as he would have examined a steed. But greater merriment was occasioned by the Queen's coachman, who insisted that, as a matter of form, he ought to make believe to drive the engine. After some dispute he was told that he might climb on to the pilot engine which was to precede the royal train, and the good fellow actually did this; but his scarlet livery, white gloves, and wig suffered so much from soot and sparks that he made no more fuss about his rights in after trips. The run to Paddington was successfully accomplished, and the motion of the train was found to be so pleasant that the Queen readily trusted herself to the railway for a longer journey a few weeks later, when she paid her first visit to Scotland."

About this time the mania for railway speculations set in. Vast sums were subscribed for projected lines; in the autumn of 1845 a table published by the *Times* showed that 1,428 companies had been registered and were pledged to the outlay of £701,243,208. A panic followed. "For a while railway scrip was not only unsalable, but not to be parted with as a gift. Holders of half-paid-up shares resigned themselves to bankruptcy and men who had raved at Parliament for not passing railway bills with sufficient speed leaped with joy when it happened that the project of their particular company was thrown out, thereby enabling the concern to be wound up and the shareholders to be discharged from further liability." At the time of the first jubilee (1837) the railway mileage in the United Kingdom was 277,131.

VIRGINIA, a Southern State, one of the original thirteen, ratified the Constitution June 25, 1788; area, 42,450 square miles. The population, according to each decennial census, was 747,610 in 1790; 880,200 in 1800; 974,600 in 1810; 1,065,116 in 1820; 1,211,405 in 1830; 1,239,797 in 1840; 1,421,661 in 1850; 1,596,318 in 1860; 1,225,163 in 1870; 1,512,565 in 1880; 1,655,980 in 1890; and 1,854,184 in 1900. Capital, Richmond.

Government.—The following were the State officers in 1900: Governor, J. Hoge Tyler; Lieutenant Governor, Edward Echols; Secretary of State, Joseph T. Lawless; Attorney-General, A. J. Montague; First Auditor, Morton Marye; Second Auditor, Josiah Ryland, Jr. (succeeded, Oct. 17, by John G. Dew); Treasurer, A. W. Harman, Jr.; Adjutant General, W. Nalle; Superintendent of Public Instruction, Joseph W. Southall; Commissioner of Agriculture, George W. Koiner; Railroad Commissioner, James C. Hill; Commissioner of Labor, Archer Montague (succeeded, Feb. 1, by J. B. Doherty); Register of the Land Office, J. W. Richardson; President of the Supreme Court of Appeals, James Keith; Justices, John W. Riely (succeeded, Oct. 1, by A. A. Phlegar), John A. Buchanan, George M. Harrison, and Richard H. Cardwell. All are Democrats.

Population.—The census of 1900 shows the increase of population for the State to have been

198,204, or 11.9 per cent. The largest gains were made in the cities and in counties contiguous to cities. The increase in the southwestern mining section was also large. The population of Richmond, 85,050, is larger than in 1890 by 3,662, a gain of 4.5 per cent. During the decade thousands of people removed from the city proper to the suburbs, and, taken together, the urban and suburban inhabitants comprise a population of about 125,000. In 1801 the population of Richmond was about 6,000. The population of other cities in 1900 was: Petersburg, 21,810; Roanoke, 21,495; Newport News, 19,635; Lynchburg, 18,891; Portsmouth, 17,427; Danville, 16,520; Alexandria, 14,528; Manchester, 9,715; Staunton, 7,289.

Finances.—The operations of the treasury for the fiscal year ending Sept. 30 are indicated in the following synopsis of the Treasurer's report:

On account of the Commonwealth: Balance on hand Oct. 1, 1899, \$605,942.45; received in the fiscal year 1899-1900, \$3,739,267.92; total, \$4,345,210.37. Disbursed in the fiscal year 1899-1900, \$3,530,875.33. Balance on hand Oct. 1, 1900, \$814,335.04.

On account of the literary fund: Balance on hand Oct. 1, 1899, \$204,280.54; received in the fiscal year 1899-1900, \$271,107.56; total, \$475,388.10. Disbursed in the fiscal year 1899-1900, \$269,879.01. Balance on hand Oct. 1, 1900, \$205,509.09.

On account of interest on the public debt: Balance on hand Oct. 1, 1899, \$4,005.39; received in the fiscal year 1899-1900, \$696,388.32; total, \$700,393.71. Disbursed in the fiscal year 1899-1900, \$683,509.73. Balance on hand Oct. 1, 1900, \$16,883.98.

On account of the sinking fund: Balance on hand Oct. 1, 1899, \$437,860.63; received in the fiscal year 1899-1900, \$138,129.39; total, \$575,990.02. Disbursed in the fiscal year 1899-1900, \$507,160.60. Balance on hand Oct. 1, 1900, \$68,820.42.

On account of the Miller fund: Balance on hand Oct. 1, 1899, \$10,271; received in the fiscal year 1899-1900, \$70,339.35; total, \$80,610.35. Disbursed in the fiscal year 1899-1900, \$64,560.65. Balance on hand Oct. 1, 1900, \$16,040.70.

The total balance in the treasury to the credit of the several funds Oct. 1, 1900, was \$1,221,589.23. In addition to this the United States direct tax fund had to its credit \$1,162.74.

From the annual report of the State Board of Fisheries it appears that the net income to the State from its oyster beds for the fiscal year ending Sept. 30 was about \$70,000. During the thirty months of its existence the board had saved to the State \$150,000.

Education.—The cost of public schools in Virginia from the inauguration of the system in 1870 to 1900 amounts to \$36,919,186. According to the census of 1900, the school population was 691,320. In 1900 the State Superintendent of Instruction made two apportionments of the school funds among the counties and cities. Apportionment No. 1 disposed of \$196,334.88; apportionment No. 2, of \$789,487.44.

At the commencement of the University of Virginia, in June, degrees were conferred upon 97 graduates of the various departments.

Washington and Lee University conferred degrees upon 25 graduates. The commencement was marked by the dedication of the John Randolph Tucker Memorial building.

At the commencement of Roanoke College 13 graduates received the degree of A. B., and the degree of A. M. was conferred upon 3 former graduates.

The College of William and Mary, the oldest in the State, founded in 1693, graduated 30 in all departments.

A class of 25 was graduated at the Virginia Military Institute. A statue, Virginia Mourning her Dead, has been cast in Rome for the institute. As soon as the necessary funds are obtained a date will be announced for its unveiling in honor of the cadets who fell at the battle of New Market, May 15, 1864.

Randolph-Macon College, Ashland, conferred degrees upon 23 graduates. This is a college for men.

The Randolph-Macon Woman's College, at Lynchburg, which in 1900 conferred degrees upon 8 graduates, is only about eight years old, but has won remarkable success. Its fine buildings were formally dedicated Feb. 15. (See Annual Cyclopædia for 1896, page 833.)

The Virginia Polytechnic Institute, at Blacksburg, conferred degrees upon 35 graduates. Ninety per cent. of the graduates of this institution are engaged in industrial pursuits. It has the advantage of both State and national aid, and of grounds comprising over 400 acres. Its administration building, all but one wing, was destroyed by fire Feb. 1, 1900, and many valuable records, etc., were lost.

At the annual meeting of the trustees of the Peabody Educational fund, Oct. 3, the general agent presented a favorable report from Virginia on the work of the Hampton Normal and Agricultural Institute. The portion of the Peabody fund allotted to Virginia for the year ending Oct. 1, 1900, was \$5,300.

Delegates representing more than 500 teachers, members of the Virginia Teachers' League, which has a total membership of more than 1,000, held an important meeting at Richmond in December.

Penitentiary.—According to the October report of the Superintendent, the number of prisoners in the Penitentiary showed recent increase. The average number for 1899 was 1,262. The number in October, 1900, was 1,457—male and female, white and black. From July to October, 5 white and 11 colored convicts were pardoned on recommendation of the Board of Pardons.

New Charitable Organization.—Nov. 23 was the date of the organization, under a charter secured from the last Legislature, of the Children's Home Society of Virginia. It may be maintained as an independent State organization or may affiliate with the national organization, which has headquarters at Chicago. Similar organizations exist in 26 other States. The Virginia society has the whole State for its field. Its principal work will be to secure legal control of orphan children and provide homes for them in families.

Agriculture.—The State Board of Agriculture, in March, appointed 10 inspectors of fertilizers to fill places created by the Legislature of 1890-1900. One inspector was appointed from each congressional district, at a salary of \$50 a month while performing the duties of the office, the term of service being till the end of 1900. Samples of every brand of fertilizer offered for sale in the State are analyzed at the department, and the results are made known in printed bulletins, which are sent free to all farmers who apply for them. The importance of this official action may be estimated from the fact that the farmers of Virginia spend for fertilizers more than \$4,000,000 annually.

In November the State Board of Agriculture decided in favor of locating in Charlotte County the tobacco test farm to be established by the board. The Board of Supervisors of Charlotte County have agreed to give the State 500 acres for this farm.

Six prizes for Virginia apples were awarded at the Paris Exposition of 1900.

Jamestown Tercentenary.—At its annual meeting the Association for the Preservation of Virginia Antiquities appointed a committee to promote an exposition to be held at Richmond in 1907, to mark the three hundredth anniversary of the planting at Jamestown of the first permanent English colony on this continent.

Monument to Confederate Dead.—At Charles City Courthouse, Nov. 21, a beautiful monument to the Confederate dead of Charles City County was unveiled with elaborate ceremonies. The shaft, 21 feet high, is of Virginia granite, and rests upon a block of white granite 5 feet square.

Railroads.—According to official reports, the net receipts of the railroads of Virginia were greater in 1900 than in any previous year. Coal shipments to deep water were the principal feature of the traffic, but in general transportation there was enormous increase. An important event was the acquisition by the Pennsylvania Railroad of the control of the Chesapeake and Ohio and Norfolk and Western lines. Another was the consolidation of the various seaboard air-line roads.

The last spike, completing the Seaboard Air-line Railway from Richmond to Tampa, Fla., was driven at Richmond, June 2. Seven States are traversed by the Seaboard system, and its completion was celebrated as a Southern triumph in commercial enterprise.

Legal Decisions.—The Supreme Court of Appeals handed down in February a decision affirming the constitutionality of the Virginia fence law. In September the court handed down a decision holding that a judge may sue and be sued within the jurisdiction of his own court. In December an opinion was handed down by the court that the State can not sue for collection of taxes, but is confined to statutory remedies—distress of personalty or sale of land upon which the taxes have not been paid. The State can not go into equity and enforce the lien for the collection of taxes.

Lawlessness.—At Emporia, March 24, two men, one white, the other colored, were taken from the jail by a mob and hanged to a tree in front of the courthouse, no effort, apparently, having been made, either by citizens or by officers of the law, to prevent the lynching, which was participated in by both white men and negroes. The negro who was lynched had shot and killed two of the most popular citizens of Greenville County, and the white victim was hanged because he had been in company with the murderer when his crime was committed.

A young negro charged with the murder of an aged farmer near Buffalo Springs, April 22, was saved from lynching at the hands of a mob, which several times gathered and demanded his life, by the resolute action of the constable having him in custody.

In the lower part of Wythe County, Dec. 6, a young negro who had committed a criminal assault was taken from an officer and put to death by a mob near the scene of his crime. A negro companion who was arrested along with him escaped the same fate through a "compromise verdict" of the mob, who "tore his clothing from the upper portion of his body and whipped him unmercifully."

On the night of Dec. 1 the house of a justice of the peace, at Goode, Bedford County, was surrounded by a mob, who poured into it "a perfect rain of bullets and buckshot," the fire being directed particularly toward the justice's room and bed. He was badly wounded in the arm, but returned the fire, and the mob soon retired. A re-

ward of \$50 was offered by the Governor for the conviction of the men who fired upon the house.

Legislative Session.—The General Assembly, after a three months' session, adjourned March 7. The session was marked by the great amount of work accomplished, and by the extraordinary number of local and special bills passed. Some of the most important were these:

To require railroad companies to provide separate cars or compartments for white and colored passengers. This bill was passed without a dissenting vote in either house.

To provide for separate accommodations for whites and blacks on steamboats, etc.

To provide for a recodification of all legislation as to oysters, clams, crabs, fish, etc.

To prescribe the weight of a barrel of apples, and the size of barrels to be used in packing and shipping the same.

To prevent riotous conduct on trains.

To incorporate the John Marshall Memorial Association.

To incorporate the Jackson Memorial Association.

To submit to the qualified voters the question of calling a constitutional convention.

To provide for submission to the people amendments to sections 1 and 2 of Article VII of the Constitution, and also of Article X.

To create a State Department of Insurance and provide for an insurance commissioner.

Authorizing cities and towns to maintain free libraries.

To create the office of commissioner of valuation in every county and city of the State. The Supreme Court of Appeals, on March 30, declared this act unconstitutional.

To amend the delinquent land law, popularly known as "the land-grabbers' law" of the preceding Legislature. This law had met with strong public disfavor, and the amendments of 1900 eliminated many of its objectionable features.

To provide for the appointment of State and local boards of health.

Incorporating various railroads.

To incorporate the Negro Agricultural and Industrial Society of Virginia.

To incorporate the Children's Home Society of Virginia.

The Senate, on March 3, by a vote of 20 to 2, passed a resolution, which had already passed the House of Delegates, calling on the Virginia Senators in Congress to vote for an amendment to the Constitution of the United States making United States Senators elective by direct vote of the people.

The Legislature granted to the Virginia Fair Association a charter whereby horse racing and "glove contests" are authorized.

By the general pension bill passed by the Legislature, in addition to numerous private bills, the sum of \$135,000 was appropriated. The bill makes some changes in the pension law, one of the most important of which provides for payment to widows of Virginia soldiers, sailors, or marines who have died since the civil war the sum of \$25 per annum, upon conditions prescribed in the bill.

Important action was taken by this Legislature in the direction of removing the disabilities and extending the rights of married women in respect of property and various matters of individual legal status.

Political.—The Republican State Convention met in Norfolk, April 10. Candidates for presidential electors at large were nominated. The resolutions approved the administration at Wash-

ington, commending its financial and foreign policies; approved the ship subsidy bill in Congress, and opposed the civil service laws and urged their repeal or modification. They denounced the Legislature of 1899-1900 for adding to the "iniquitous election laws" and increasing the number of officeholders, and for the provision for holding a constitutional convention, which would result in the formation of an office-holding oligarchy that could only be overthrown by revolution.

The Democratic State Convention met in Norfolk, May 2. Presidential electors at large were nominated. In the platform the principles of democracy as enunciated in the Chicago platform of 1896 were approved, and the delegates to the national convention were instructed to vote for William J. Bryan as the candidate for President. The Republican policy of imperialism was denounced as undemocratic, un-American, and unconstitutional. The platform demanded that the Philippine Islands be turned over as soon as practicable to their own inhabitants; that a just territorial government be given to Porto Rico; and that the solemn declarations of our Government concerning Cuba be promptly and honorably made good. Opposition was declared to militarism and great standing armies as the worst enemies of the republic. Criminal trusts and other illegal combinations of capital were denounced as a serious menace to the public welfare, and the Republican party was arraigned for failing to enforce existing laws and to enact others against them. The State administration was approved and the people were congratulated upon its liberal support of the public schools and of disabled Confederate soldiers and Confederate widows. The platform approved the action of the General Assembly in submitting to the people the question of calling a constitutional convention, and counseled that in framing a new Constitution no effort should be made to disfranchise any citizen of Virginia who had a right to vote prior to 1861, nor the descendant of any such person.

At the elections of May 24 the Democrats were generally successful in the election of local officers. The most important question before the people, that of calling a constitutional convention, was decided in the affirmative, and it remained for the next Legislature to fix a date for the convention to meet. The total vote on this question was 137,732, and the majority in favor of the convention was about 17,000.

At the general election of Nov. 6 the Democrats of the State elected their full congressional ticket by a majority of more than 60,000. The presidential vote was divided as follows: Bryan, 146,080; McKinley, 115,865; Woolley, 2,150.

VISUAL INSTRUCTION, information that reaches the mind chiefly through the sense of sight, aided by the explanation of the teacher. A picture of the subject to be studied, or a series of pictures of different parts of the subject, is



THE AMERICAN MUSEUM OF NATURAL HISTORY, SOUTH FRONT.



AUDITORIUM IN MUSEUM OF NATURAL HISTORY, SHOWING SPECIAL GALLERY FOR LANTERNS.

projected upon a white screen or background in a dark room by means of a stereopticon. This picture is magnified many times so that it can be seen in minutest detail by the class or audience. Visual instruction is not a new method of imparting knowledge, but it is now carried to such perfection, and is found so helpful in the study of science, history, travel, and domestic economy, that it is worthy to be termed an art.

The Pictures.—A photographic negative of the object to be studied is first made, from which a positive is printed upon a prepared glass $3\frac{1}{2}$ by 4 inches in size. The glass for these positives must be clear and bright to give the best results. All objects covered by the picture will appear in light and dark shades, showing upon the canvas without color, but these positive pictures may be so tinted by a skillful artist that Nature will be reproduced quite accurately. Especially is this true of landscapes, birds, mammals, and flowers.

The Projecting Instrument.—The primitive method of projecting these pictures upon a screen was by means of the magic lantern, beginning with its use as a mere toy, where a common oil lamp was employed for a light, and coming by degrees to the use of the stereopticon, single, double, and triple. The stereopticon consists of a case of metal in which is placed the light, the condenser for concentrating the rays of light, the lenses or object glasses for magnifying the pictured object, and the slide holding the positive picture in place.

The Illuminator.—The oil lamp can not be made to throw a light strong enough to bring out the pictures distinctly without the use of many wicks and consequent imperfect combustion, im-

parting a yellow color to the flame, and frequently causing smoke annoying to the lecturer as well as to the audience. House gas, by means of the Welsbach burner, may be used in a parlor or schoolroom, but the extreme delicacy of the "mantle" employed prevents its general use as an illuminator even as a stationary light. Acetylene gas is of recent use, and has been found to be superior to oil light. The oxyhydrogen or lime light projects a very clear, bright picture, and is in common use for illumination in illustrated lectures. The electric light is more intense and penetrating than the lime light, and the mechanism of the lamp has been so simplified and brought to such a state of perfection that it is easily manipulated, and that light is now used exclusively at the American Museum of Natural History.

Other Methods.—Visual instruction may be imparted in other ways than by the use of the stereopticon. The microscope permits of the investigation of infinitesimal objects in Nature in all their complicated structure and in their natural, variegated coloring, but only one person can use the instrument at a time unless the microscope be connected with the stereopticon. Thus few students could become familiar with the natural objects beyond their own immediate vicinity. For the popular purposes of visual instruction the stereopticon and the photograph have established themselves permanently in the principal educational centers.

The American Museum of Natural History.—The present standing of visual instruction and its development are best shown as exemplified at the American Museum of Natural History, of

which Mr. Morris K. Jesup is president of the Board of Trustees, and which is located at Seventy-seventh Street and Central Park West, where this method of public instruction has attained its highest perfection under the direction of Albert S. Bickmore, A. M., Ph. D. In 1882 Prof. Bickmore began his work in visual education by means of illustrated lectures in a single room at the museum, before an audience of 28 persons, mostly school-teachers. In 1884 his subjects illustrated were the skeleton, muscular system, arteries and veins, nervous system, digestion, respiration, hygiene, granites and sandstones, limestones and marbles, evergreen trees (pine, spruce, cedar), deciduous trees (oak, elm, and maple). In 1885 two rooms were necessary to accommodate the growing classes. Then Chickering Hall, at Eighteenth Street and Fifth Avenue, was filled, and shortly afterward a hall at the museum, accommodating about 1,000 persons, was fitted up with all the appliances necessary for the presentation of illustrated lectures in a form as nearly perfect as could be conceived of at that time. The desire of the teachers and general students to get the benefit of this visual instruction became so great that for several years each new lecture has been repeated four times to entirely different audiences.

Within the last year there has been completed and dedicated at the museum a new hall, the most complete in the world devoted entirely to visual instruction. It will accommodate 1,366 persons with chairs. It is so arranged as to double screens, galleries, and auditorium that each listener may have a direct view of both pictures on the screens at the same time.

The museum gives its instruction under the auspices of the Department of Public Instruction of the State of New York. The provisions for 1900, passed in 1895 and 1899 were: An act to provide that additional facilities for free instruction in natural history, geography, and kindred subjects, by means of pictorial representation and lectures, may be furnished to the free common schools of each city and village of the State that has, or may have, a superintendent of free common schools. In section 1 the State Superintendent of Public Instruction was authorized to furnish the facilities called for by this act. The local school authorities are allowed to "cause the aforesaid illustrated lectures to be repeated to their artisans, mechanics, and other citizens on the legal holidays and at other times. Any institution instructing a teachers' training class, or any union free school, may have the free use of the apparatus upon payment to the Superintendent of Schools, loaning the same, the necessary expenses incurred in such use, or injury to said property." In section 2 an annual report of each school superintendent to the Department of Public Instruction is made necessary, containing a full statement of the extent to which the prescribed instruction has been given, with the usefulness of the same. In section 3 the sum of \$38,000 was appropriated for the support and maintenance of

said instruction for the year beginning Oct. 1, 1900. In section 4 the State Superintendent of Public Instruction was authorized to permit the sale of the slides for illustrative teaching to such educational institutions of the State as give free instruction to their pupils. The slides are sold at the cost of manufacture.

Subjects Treated.—Under similar previous statutes, up to the close of 1900, 354 lectures had been given, covering 187 different subjects, the slides having been furnished to the State normal schools, to the conductors of teachers' institutes, to the office of the Department of Public Instruction at Albany, and to the several cities and towns. These lectures concerned the following subjects: Human anatomy and physiology; building and ornamental stones; physical geography; birds, fishes, reptiles; geography and ethnology; astronomy, the sun, moon, and tides; gold, silver, and iron; planets, the earth; geology, botany, forestry; Columbian Exposition; tea, coffee, and sugar; useful minerals; coal and oil; foods. From the above-mentioned lectures a committee, representing the Council of School Superintendents of the State of New York, have made their selection. The subjects chosen for 1899-1900 were: Luzon and Manila, the Visayas and Sulus, the Hawaiian Islands, and Alaska; and for 1900-1901, Exposition of Paris in 1900, Paris and South America.

Prof. Bickmore often travels thousands of miles at his own expense to secure the materials for one lecture. He is usually accompanied by an expert photographer, who takes many pictures of every important place and object of interest. The best negatives are then selected, and 72 slides are prepared for one lecture; 85 sets of these slides are then made, and a full set is sent to the following educational centers: Albany, Amsterdam, Auburn, Binghamton, Buffalo, Cohoes, Corning, Cortland, Dunkirk, Elmira, Geneva, Gloversville, Hornellsville, Hudson, Ithaca, Jamestown, Johnstown, Kingston, Little Falls, Lockport, Middletown, Mount Ver-



HALL OF PALEONTOLOGY.

non, Newburgh, New Rochelle, to each of the boroughs of New York city, Niagara Falls, North Tonawanda, Ogdensburg, Olean, Oswego, Poughkeepsie, Rensselaer, Rochester, Rome, Schenectady, Syracuse, Troy, Utica, Watertown, Watervliet, and Yonkers, besides the villages of Albion, Batavia, Canandaigua, Catskill, Glens Falls, Haverstraw, Herkimer, Hoosick Falls, Ilion, Lansingburg, Malone, Mechanicsville, Medina, Norwich, Nyack, Oneonta, Owego, Peekskill, Penn Yan,

Plattsburg, Port Chester, Port Jervis, Saratoga Springs, Seneca Falls, Sing Sing, Tonawanda, Waterford, and White Plains. About 26,000 stereopticon slides are furnished by the museum each year to these cities and towns in the State of New York, and with each set of views is sent a copy of Prof. Bickmore's lecture on that subject.

Slides for Other States.—Arrangements are now perfected whereby the museum will send the slides and lectures to the State superintendents of other States and to Canada, at a nominal charge to cover the cost of manufacture and delivery, under these restrictions, as stated in the circular letter:

"We are not dealers in slides, but we are desirous of promoting free public education throughout our land by means of illustrated teaching; and the State Superintendent of Public Instruction of the State of New York, under whose auspices our entire system is carried on, has given us authority to supply, as a matter of interstate courtesy, the superintendent of public instruction of each other commonwealth with one series, and no more, of our slides at cost, after we have finished the work which is required of us by the statutes of our own State. We do not keep a stock of slides on hand, but fill each order separately; hence considerable time must elapse before a shipment can be made, and we can only

lectures will be repeated many times at the American Museum of Natural History, and in all the educational centers of the State of New York. In this way the people will become familiar with coming events, and will be educated up to a point where they may derive the greatest benefit from the exposition.

For the Kindergarten.—One of the most beautiful lectures ever prepared by Prof. Bickmore is for the kindergarten. It consists of 24 views of natural objects seen in the country—as boys riding on horseback, children of a district school at recess, driving the cows, gathering apples, etc.; 24 pictures of buildings and street scenes in the city; and 24 views of the seashore—lighthouse, sailing vessel, waves, etc. Each view is explained by a children's song, or in such words as are familiar to children. This lecture has demonstrated that visual instruction is as valuable for children as for their parents.

A Gold Medal.—At the Exposition of Paris in 1900 an exhibit was made by Prof. Bickmore, representing conjointly the American Museum of Natural History and the Department of Public Instruction of the State of New York, of the slides and general methods of visual instruction as carried on in New York State, and showing the wide system of free public education. The International Jury of Fifteen, eleven of whom were Frenchmen, unanimously awarded to the lecture department of the museum a gold medal, the museum having outstripped all competitors in the excellence of its exhibit of colored slides and in the perfection of its system of educational work. While in Paris, Prof. Bickmore, at the request of the *École Internationale*, gave three illustrated lectures on the United States and their dependencies at its annual meeting. So highly was his work appreciated that he was invited to attend the next annual meeting of the *École Internationale* in 1901, to be held at the International Exposition in Glasgow, Scotland, and give a series of lectures, and then repeat them in the principal cities from Glasgow to London, that the British public might



THE JESUP COLLECTION OF NORTH AMERICAN WOODS.

undertake the preparation of such illustrations between May 1 and Sept. 1. Each lecture is sold complete, and not a selection of slides therefrom."

The New York State Superintendent's restrictions on the use of this visual instruction material are: "In no case shall the use of said apparatus be permitted at any lecture where an admission fee shall be charged, or which shall be given in connection with any other entertainment of any nature, or for the benefit of any private school, church, Sunday school, hospital, or any purpose not connected with the free common schools of the State. No copies in any form may be made from our manuscripts or slides."

The Purpose in New York State.—It is known that in the year 1901 a Pan-American Exposition will be held at Buffalo, N. Y. That this exhibition of the material and intellectual progress of the North and South Americas may be duly appreciated, Prof. Bickmore, in 1900, prepared a series of three lectures on the scenery and natural resources of South America. These

become acquainted with the latest phase of visual instruction in the New World. Mr. W. F. Stead, of the Review of Reviews, London, commended the American Museum's system of visual instruction, and showed the demand for it in England and throughout the English-speaking colonies. The system will soon be introduced into Madras, southern India, whence it will probably spread through the peninsula.

In the City of New York.—For the season of 1899-1900 the school authorities of the city of New York appropriated \$100,000 to be expended under the supervision of Dr. Henry M. Leipziger for free public lectures for the people. Two thousand lectures were given at various educational centers in the boroughs of Manhattan and the Bronx. These lecture centers are all fitted out with lanterns and screens and all the necessary apparatus for visual instruction. A count of the people present at each lecture shows that 550,000 persons availed themselves of the privilege of this system of education; and the lectures included

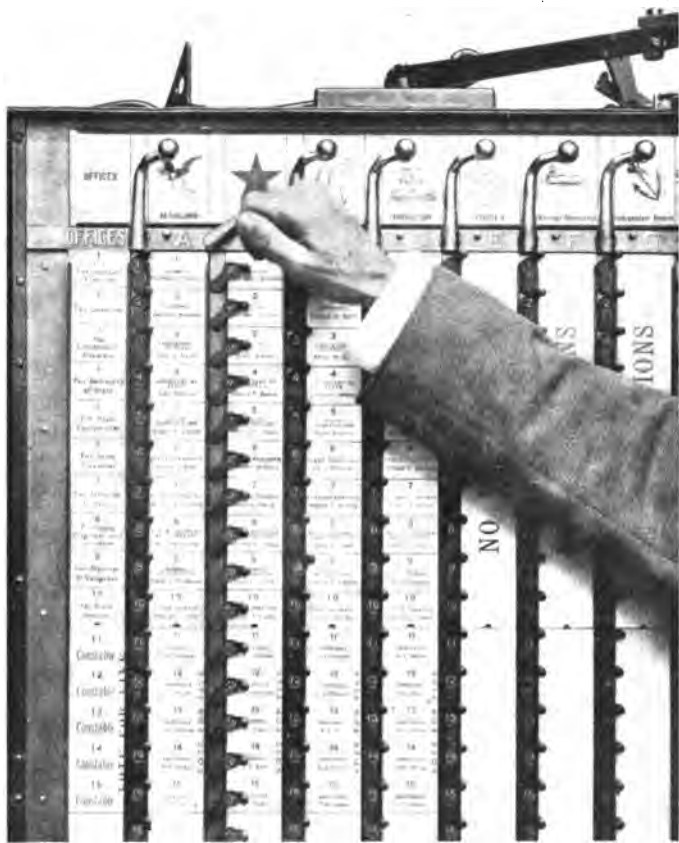
almost every subject about which information may be imparted. The free visual instruction in the city of New York was begun thirteen years ago in only a few centers and at a small expenditure of money. Each year the system has been enlarged by the earnest demand of the public for this form of education, until it is now come to be recognized as a prominent and important branch of the city's educational work. In the past year a similar system of free public lectures to the people was inaugurated in Brooklyn, under the auspices of the Board of Education of that borough.

VOTING MACHINES, mechanical devices used in place of paper ballots in elections, which also count and add the votes cast. Some operate by the deposition of balls or disks, some by perforations in a sheet of paper, which are afterward counted, and others, of the self-registering type, are supplied with an indicator adjacent to the name of each candidate, which is operatively connected with an internal mechanical register—one for each candidate. In this last type of machine the voter makes his selections by placing the different indicators in position to signify his choice of all the candidates, and by the subsequent operation of a lever or turnstile registers his selections as indicated.

According to the present election laws in force in the United States, a voting machine must be so constructed that it enables a voter to cast his vote in secret; that it counts positively each vote cast; that it permits a voter to make such selection among the candidates as he wishes—for all of one party, or in part for those of one party and in part for those of other parties; that it permits the voting for persons nominated by any party, and at the same time prevents voting for candidates in excess of the number to be elected; that it be convenient in its operation for the voter, with little instruction, and so constructed that it may be arranged for use by unskilled persons; that it be so constructed that it will not become inoperative during an election; that it be so arranged that the blind and illiterate are able to operate it without assistance; that it will permit a voter having made an error to change his vote while in the booth; that it will permit voting for or against questions or amendments; that it will permit the voter both to indicate and register his own vote, and place it beyond the power of any one else to deprive him of it; that it will permit limited voters, women and certain nontaxpayers, to vote for certain candidates and on certain questions, and at the same time prevent them from exceeding their privileges.

In 1848 a patent was issued in England for a mechanical device for the registering of votes, but no voting machine was manufactured until the invention of the Myers ballot machine in Roch-

ester, N. Y. The Myers machine consisted of a steel booth 5 feet square and 7 feet high. The voter entered by a door, which was closed, and



A VOTING MACHINE IN USE.

found names of candidates arranged in the form of an Australian ballot upon one side of the machine, and opposite each candidate's name a push knob, which the voter pressed to indicate his choice. Then by his passing through a small vestibule and out of an exit door, the mechanical counters of the candidates he had chosen were actuated and the machine was arranged for the next voter. The Myers machine was first used in April, 1892, and for a few years following, with some success, but for some reason the manufacture was discontinued in 1898.

The United States voting machine, manufactured under the S. E. Davis patents of 1894 and 1895, is arranged to be used without the aid of a booth, the face of the machine being turned away from the public, and screens at either end of the machine rendering the casting of the ballot secret. In this machine the party nominations are arranged in horizontal lines from left to right, and below each candidate's name is a small pull knob, which is connected with the counter for that candidate, and at the left of each party line is a large knob, the pulling of which will vote a straight party ticket. The ballot may be cast by first pulling out a party knob and returning the knobs of such candidates as are not to be voted for, and in their stead knobs pulled out for such candidates as are desired. Or the voter may, if

he wishes, operate the individual knobs without first pulling out the straight-vote knob. At the close of the election the fronts of the counters are exposed to view, and a record is taken of the result. This machine has been in use in Hornellsville since 1896, and lately in Jamestown and Syracuse, N. Y., and Detroit, Mich. This was the



A VOTING MACHINE, OPEN.

first machine to fulfill completely all the requirements of the present election law.

The Standard voting machine, patented by A. J. Gillespie, of Atlantic, Iowa, in 1897, is about 4 feet square and 8 inches deep, and is supported by legs, the top being about 6 feet from the floor. The ticket is arranged upon the face of the machine in the form of an Australian ballot, the party

nominations being in vertical columns, with a numbered pointer at the left of each candidate's name and a large lever at the top of each party column. Extending from the top of the machine outward about 4 feet is a semicircular rod, upon which a curtain is drawn by the voter as he enters the machine, thus inclosing himself in a booth and unlocking the machine for voting. To vote on this machine, a straight-vote lever is pulled down, which turns a pointer over the name of each candidate in that party. Should the voter then desire to split, he can do so by turning back any of the individual pointers and in their places turning others over the names of the candidates he wishes to favor. This machine fulfills every requirement under the present election law. The Standard voting machine was first used at a city election in Rochester in 1898, and since then it has been adopted in Buffalo, Utica, Ithaca, Elmira, Auburn, Oswego, Niagara Falls, Rome, Poughkeepsie, Hudson, Johnstown, Gloversville, and many towns. In no case where this machine has been adopted has there been a return to the paper ballot.

Dr. R. H. Thurston, one of the three voting-machine commissioners of New York State, and head of the mechanical department of Cornell University, in his report on this machine for the election in Ithaca in November, 1899, says:

"1. The voting machine is a simple, reliable, durable, and convenient apparatus for its purpose.

"2. The machine compels the deposit of a perfect and accurate ballot, of the form chosen by the voter.

"3. It restricts the voter absolutely to the limits of the law and permits him freedom as absolute in voting within that limit.

"4. Defective ballots, the usual fault of ordinary methods of voting, are entirely done away with, and no man loses his vote through defect of the system, or fault of his own, if he votes at all. The disfranchised voter becomes unknown.

"5. Fraudulent voting is impossible, as well as errors in voting.

"6. The vote cast is registered, vote by vote, with absolute accuracy and certainty.

"7. The result can be declared immediately upon the close of the polls, having been already completely counted.

"8. The cost of the system is so much less than that of the old method that the machines usually pay for themselves in three to seven years."

W

WASHINGTON, a Pacific coast State, admitted to the Union Nov. 11, 1889; area, 69,180 square miles. The population, according to each decennial census since admission, was 349,390 in 1890 and 518,103 in 1900. Capital, Olympia.

Government.—The following were the State officers in 1900: Governor, John R. Rogers; Lieutenant Governor, Thurston Daniels; Secretary of State, W. D. Jenkins; Treasurer, C. W. Young; Auditor, Neal Cheatham; Attorney-General, P. H. Winston; Adjutant General, E. H. Fox; Superintendent of Education, F. J. Browne—all Populists except Winston, who is a Silver Republican; Commissioner of Public Lands, Robert Bridges; Dairy Commissioner, E. A. McDonald; Veterinarian, S. B. Nelson; Insurance Commissioner, C. J. Heifner; Chief Justice of the Supreme Court, M. J. Gordon, who resigned Aug. 1; Associate Justices, R. O. Dunbar, Mark A. Fullerton, T. J. Anders,

James R. Reavis; Clerk, C. S. Reinhart—all Republicans except Reavis, who is a Democrat.

State officers are chosen for terms of four years, at the time of the presidential elections. The Legislature meets biennially in January of the odd-numbered years. It is composed of 34 Senators and 80 Representatives.

Population.—The State has gained 48.2 per cent. in the past decade. The census by counties in 1900 was as follows: Adams, 4,180; Asotin, 3,366; Chehalis, 15,124; Chelan, 3,931; Clallam, 5,603; Clark, 13,419; Columbia, 7,128; Cowlitz, 7,877; Douglas, 4,926; Ferry, 4,562; Franklin, 486; Garfield, 3,418; Island, 1,870; Jefferson, 5,512; King, 110,003; Kitsap, 6,767; Kittitas, 9,704; Klickitat, 6,407; Lewis, 15,157; Lincoln, 11,969; Mason, 3,810; Okanogan, 4,689; Pacific, 5,983; Pierce, 55,515; San Juan, 2,928; Skagit, 14,272; Skamania, 1,688; Snohomish, 23,950; Spo-

kane, 57,542; Stevens, 10,543; Thurston, 9,927; Wahkiakum, 2,819; Walla Walla, 18,680; Whatcom, 24,116; Whitman, 25,360; Yakima, 13,462.

The population of Seattle is 80,671; in 1890 it was 42,787. Tacoma has grown from 36,006 in 1890 to 37,714 in 1900. Spokane has 36,848 inhabitants. The population of incorporated places having more than 2,000 and fewer than 25,000 is as follows: Aberdeen, 3,747; Ballard, 4,568; Colfax, 2,121; Dayton, 2,216; Everett, 7,838; Fairhaven, 4,228; Hoquiam, 2,608; New Whatcom, 6,834; North Yakima, 3,154; Olympia, 4,082; Port Angeles, 2,321; Port Townsend, 3,443; Republic, 2,050; Roslyn, 2,786; Snohomish, 2,101; Vancouver, 4,006; Walla Walla, 10,049.

Finances.—The following statements are taken from the Governor's message at the beginning of 1901:

"Four years ago the total State debt was \$2,176,347.04. This, in spite of the fact that our State Constitution, in the most explicit terms, forbids any indebtedness in excess of \$400,000. Of this total debt, \$1,777,916.03 was in the form of general fund warrants. These, with the military fund warrants, amounting to \$90,429.61, called for 8 per cent. interest, or a total of \$150,000 in interest per annum, approximately. Warrants were two and a half years in arrears, so that on each dollar used by the State in the conduct of its business 20 per cent. in interest was paid. During the past eight years there has been paid, as interest on State indebtedness, mostly to brokers and dealers in warrants, the enormous sum of \$916,713.36. During the past four years the total outstanding indebtedness has been reduced from \$2,176,347.64 in 1897 to \$1,392,639.60 on Jan. 1, 1901, and of this latter amount \$730,000, in the permanent school fund, has, under the law of 1899, been used by the State in the payment of general fund warrants and the issuance of 3½-per-cent. State bonds, which, in lieu of cash expended for this purpose, are placed in the permanent school fund. On general fund warrants thus redeemed, bearing interest at 8 per cent., there has been a direct and positive saving of 4½ per cent.; and as the 3½ per cent. accruing upon these bonds is added to the permanent school fund there has been a practical saving of all interest charges upon nearly \$750,000. Interest charges have been still further reduced by a reduction of the rate paid, from 8 to 5 per cent. Instead of more than \$2,000,000 of indebtedness, the greater part bearing interest at 8 per cent., as was the case four years ago, the following exhibit shows the condition of the State debt on Jan. 1, 1901: General fund warrants, bearing 5 per cent. interest, less cash on hand, \$516,398.02; State bonds, bearing 3½ per cent. interest, \$155,000; school bonds, bearing 3½ per cent. (interest covered into treasury), \$730,000; total, \$1,401,398.02; less cash in interest fund, \$8,738.36; total debt, \$1,392,659.66.

"Among the causes leading to an improved condition of the State's finances must be named the enactment of the revenue law of 1897. This has been found most efficient. The issuance of delinquent tax certificates, bearing 15 per cent. interest, operates to induce prompt payment of taxes. The Bedford law of 1899, calling for the investment of money in the permanent school fund in outstanding general fund warrants, is also to be credited with saving to the State large sums of interest."

The State levy as fixed this year is as follows: For schools, 3½ mills; general fund, 2½ mills. The military and interest fund levies are regulated by statute and are each ½ of 1 mill. In 1899 the levy was as follows: For schools, 3½ mills; general

fund, 2½ mills. The general fund levy is considerably less than last year, but the school fund levy is more; the reason for this is that the levy for schools is based on the number of school children in the State. Last year there were 127,366, while this year the number is 139,554.

The Auditor's estimate of the receipts of the general fund during the biennial term beginning April 1, 1901, is \$1,820,000, and of expenses, \$1,116,800.

Education.—The law requires a State tax, not exceeding 4 mills, sufficient to produce \$8 for each child of school age; this is for the common schools. Five institutions of higher learning are supported by State appropriations: The University of Washington, at Seattle; the Washington Agricultural College and School of Science, at Pullman; and three State normal schools, one at Cheney, for the eastern portion of the State; one at Ellensburg, for the central; and one at New Whatcom, for the northwest. The ordinary expense of these institutions to the State is about as follows: Agricultural College, \$15,000; State University, \$40,000; normal schools, \$45,000.

Olympia is endeavoring to raise an endowment of \$15,000 for a university which certain capitalists have offered to found on condition of this fund being given by citizens. It is to be called the Olympic University. The formal offer to the committee appointed by the Chamber of Commerce describes the proposed institution, giving among other details the following peculiar feature: "Said parties propose to the best of their ability to make said Olympic University a national institution by operating in connection with it a 'department of travel,' which is an organized plan to combine the advantages of travel and observation with the usual text-book work, and by means of this organized plan they expect to bring students from all parts of the country and to build and maintain an institution at Olympia sufficient to accommodate them."

The text-books for the public schools are selected once in five years by the State Board of Education. Those for the coming five years were chosen in May. A large part of those adopted are publications of a local house lately established, and some were prepared by "local talent." Protests in regard to two of them have been made by the superintendents of many of the schools. One of them says: "We examined the geography at the last board meeting and agreed it was wholly unfit for use. Its maps are inaccurate and poorly colored. It contains bad spelling and ungrammatical sentences. The map of Washington is especially poor. The speller is full of errors, some of which are typographical and some apparently made through ignorance. No teacher will dare give out a lesson before going over it in advance and correcting mistakes. I should have preferred to use no text-book at all rather than these."

Militia.—The National Guard consists of 1 full regiment of infantry, made up of 3 battalions of 4 companies each, and in addition 2 companies of infantry unattached, 1 battery without guns, drilling as infantry, and 1 troop of cavalry. The last Legislature appropriated \$10,000 for the purpose of bringing from the Philippine Islands the remains of those Washington boys who died in their country's service. The bodies of 22 volunteers were brought back to their home State, and all but 9 were claimed by friends and taken to their homes. These 9 were brought to the capital city, where the Masonic fraternity of Olympia gave a handsome tract of land for their interment.

Charities and Corrections.—The maintenance expenses of the State institutions for the three and

a half years ending Sept. 30 were as follow: Western Hospital for Insane, total, \$279,194.90; daily per capita, 594.96 inmates, \$0.3673; Eastern Hospital for Insane, total, \$174,258.61; daily per capita, 307.36 inmates, \$0.4438; State Penitentiary, total, \$191,169.99; daily per capita, 357.2 inmates, \$0.4190; State Reform School, total, \$67,798.70; daily per capita, 133.38 inmates, \$0.3456; Soldiers' Home, total, \$86,148.43; daily per capita, 144.5 inmates, \$0.4667.

Banks.—The report of the condition of the 27 State banks, May 31, shows: Loans, \$4,708,893; real estate, \$1,267,987; surplus, \$10,745; deposits, \$7,572,469; undivided profits, \$211,701; cash, \$1,031,912. The report of the national banks in the State, April 26, shows deposits of \$20,420,954, and cash on hand, \$2,925,252.

Public Lands.—The figures from the General Land Office for the year ending June 30 include the following concerning Washington: Area unappropriated, unreserved, and unsurveyed, 5,888,581 acres; area unappropriated, unreserved, and surveyed, 5,237,302 acres; area reserved, 12,366,791 acres; area appropriated, 19,264,206. The reserves in Washington are: Mount Rainier reserve, 2,027,520 acres; Olympic reserve, 1,923,840 acres; Washington forest reserve, 3,594,240 acres. The Priest river reserve, in Washington and Idaho, comprises 645,120 acres.

A proclamation opening the northern half of the Colville Indian Reservation in the northwestern part of the State was issued in April, to take effect, according to the law, six months later, Oct. 10. The half that is opened contains 1,500,000 acres, 300,000 of which were allotted to the Indians under the treaty of cession. It is estimated that at least 300,000 acres are first-class agricultural land, about the same area mineral land, and the remainder is covered with a fine growth of fir, cedar, and hemlock. The lands chosen by the Indians lie chiefly along Kettle river.

The report of the Geological Survey on the Olympic forest reserve says that, taken as a whole, "this is the most heavily forested region of Washington, and with few exceptions the most heavily forested section of the country. The densest forests are found in the townships near the Pacific coast, in the northwestern part of the reserve, while in the mountains, as the altitude increases, the forests become less dense and the species become of less value for lumber. The total stand of timber upon the area examined—2,400 square miles—is 37,100,000,000 feet, an average of 24,000 feet per acre for the entire area. There is no section of equal area in the State so heavily clothed with forests as this." The timber is hemlock, red fir, silver fir, cedar, and spruce. Portions of this reserve were restored to the public domain this year because more suitable for farming than for forest culture.

The total amount of timber in the State, as estimated by Mr. Gannett, of the survey, is, under the Washington lumbering practice, 114,778,000,000 feet, board measure. Of this amount, more than nine tenths, or 103,504,000,000 feet, is west of the crest of the Cascade range, the remainder—11,274,000,000 feet—being upon its eastern slope and in the northern and eastern portions of the State. "With the exception of the redwoods of California," he says, "the forests of Washington are the densest, heaviest, and most continuous in the United States. Except for a few prairie openings, and except where removed by fire or the ax, they cover the country as a thick mantle from high on the Cascade range westward to the shores of the Pacific. Out of the 15,858 square miles of the State formerly covered with merchantable timber,

20 per cent. has been destroyed by fire, 22½ per cent. has been cut, and the remainder, 57½ per cent., is still covered by standing timber. The present supply, as it now stands, is sufficient to supply the sawmills of the United States for four years, under the present rate of cutting."

The report of the State Land Department for the four years past shows a great increase in the leasing of school and granted lands. The total receipts from the lands from 1892 to 1896 were \$945,521.32, and from 1896 to 1900, \$1,704,374.65.

Industries and Business.—Lumber shipments were as follow for the year ended June 30, 1900: Cargoes to foreign ports, 176,911,582 feet; cargoes to domestic ports, 238,855,465 feet; rail shipments, 304,205,000 feet; total, 719,972,047 feet. The value of the foreign cargoes was \$1,835,329. No other values are stated by the Trade Register. Assuming that the domestic cargoes and shipments averaged with the foreign cargoes—\$10.40 a thousand—the total of the shipments closely approached \$7,500,000.

The Puget Sound canneries have had an unusually poor season, the pack being only 432,301 cases, 50 per cent. less than that of 1899.

The report of the Dairy Commissioner shows great growth in the dairy industry.

The first bounty of 1 cent a pound on beet sugar, offered by the last Legislature, was paid in December. It amounted to \$2,168.90, and was paid to a company in Spokane County.

The stock industry of the State of Washington is valued at \$30,000,000. The loss to stock owners from contagious diseases approximates \$75,000 annually.

The discovery of shot gold running \$10 to the cubic yard was reported in December to have been made on Fourth-of-July creek, a branch of Kettle river.

The number of articles of incorporation filed with the Secretary of State in 1897-'98 was 1,852; in 1899-1900 it was 2,168. The receipts for the first two years amounted to \$74,773.47, and for the last two \$91,150.39.

The State Capitol.—An application was made in December for a writ of mandate against the Governor and the other Capitol Commissioners, to appear and show cause why they should not go on with the building of the new Capitol. The application was made by F. H. Goss, to whom the contract was awarded Jan. 30, 1896. The action was dismissed in the Superior Court, but may be appealed to the Supreme Court. The Governor explains the matter in his message. "The State has from the General Government," he says, "a grant of 132,000 acres of wild lands, donated for the purpose of aiding in the erection of public buildings at the State capital. But this donation is unproductive. It is agreed that these lands can not now be sold. Regarding their future value a great difference of opinion prevails. Two years ago it was said that if a State Capitol was immediately desired a proposition to purchase the Thurston County courthouse might be successfully managed. This is a beautiful building, centrally located, costing \$150,000. The State holds in the permanent school fund \$150,000 of Thurston County warrants. An exchange of paper might transfer the title. One hundred thousand dollars, carefully expended, would build an addition to the rear, in the same general style of architecture, containing comfortable quarters for the State Legislature."

Political.—State officers were elected in November. There were five tickets—Democratic (in which the Populists united), Republican, Prohibition, Social-Democratic, and Socialist-Labor. The

two members of Congress are elected by the State at large.

The Republicans held their first convention at Ellensburg, April 5, elected delegates to the national convention, and instructed them for President McKinley. The resolutions were mainly expressions of approval of the policy of the administration. The second Republican convention met at Tacoma, Aug. 15, and adopted a platform commending the national administration and the work of the State members of Congress, and said further:

"We favor the building of railroads within our State as an essential means of its development and growth, and we also favor the adoption and enforcement of just and equitable laws regulating and controlling them.

"We stand for loyalty to the flag; for the old standard of value for all our money; for protection and reciprocity; for the Nicaragua Canal, owned, operated, and defended by the United States; for the election of United States Senators by direct vote of the people; for the further enlargement of our trade and commerce; for such discrimination and national aid as shall speedily result in the upbuilding of our merchant marine; for the rigid enforcement of the law against trusts; for the loyal and liberal support of the nation's defenders—the army and navy—both in peace and in war; for the uncompromising suppression of the rebellion on the island of Luzon; for the unlimited defense of every foot of territory under the flag, and for the protection of every citizen in the land; for the immediate rescue of the people imperiled in China, and for ample restitution for loss of life and property therein; for a territorial form of government for Alaska, including protection to navigation, opposing relinquishing soil or sovereignty of any part of that district; for the construction of good and permanent wagon roads throughout the State; for the rigid enforcement of law and order and the economical administration of public affairs, national, State, and county."

Following are the nominations: For Governor, J. M. Frink; Lieutenant Governor, H. G. McBride; Secretary of State, S. H. Nichols; Treasurer, C. H. Maynard; Auditor, J. D. Atkinson; Attorney-General, W. B. Stratton; Land Commissioner, S. A. Calvert; Superintendent of Public Instruction, R. B. Bryan; Judges of the Supreme Court, Wallace Mount, R. O. Dunbar; Presidential Electors, Frank Hastings, S. G. Cosgrove, Charles Sweeney, J. M. Boyd; Congress, Francis W. Cushman, Wesley L. Jones.

The first Democratic convention, at Spokane, May 19, elected delegates to the Kansas City convention and adopted resolutions denouncing the attitude of the administration toward trusts and on bimetalism; opposed imperialism and the Porto Rican tariff; expressed sympathy for the Boers; opposed unrestrained Japanese immigration; approved the record of United States Senator Turner; commended the State administration; instructed the delegates for William J. Bryan, the "great commoner of the present day, who ranks with and will have a place in history with Jefferson, Jackson, and Lincoln"; and recommended James H. Lewis for Vice-President.

The Democrats, the Populists, and the Silver Republicans held conventions at Seattle, Aug. 27, and after conference met in a union convention, agreeing to pass under the Democratic name. The more significant declarations of the platform were:

"We oppose trusts and combinations which corner the products of industry and levy tribute on the people, and we denounce the Republican policy which corruptly creates and fosters these

harmful combinations. We are against monopolies of all kinds, and especially view with the gravest concern the attitude of the Republican administration in creating the greatest of all monopolies in its delegating to the national banks the sovereign right to make and issue the people's money.

"We witness with shame and humiliation the cowardly and inconsistent action of the present Republican administration, in hauling down the American flag that for a third of a century has floated in honor and unchallenged over the Porcupine mining district of Alaska.

"We demand such legislation as will insure to the farmers and producers of the State of Washington a reduction of freight rates and fares to a just basis.

"We demand the inauguration of such measures as shall give the people the right to express themselves, when they so elect, upon all important questions, by the system known as direct legislation.

"We commend the official conduct of all our State officers, and call attention to the contrast between the present excellent financial condition of the State and the blight and ruin prophesied by the opposition to surely result from the election of our State officers."

The ticket follows: For Governor, John R. Rogers; Lieutenant Governor, William E. McCroskey; Secretary of State, James Brady; Treasurer, W. E. Runner; Auditor, L. J. Silverthorn; Attorney-General, Thomas M. Vance; Superintendent of Instruction, Frank J. Browne; Land Commissioner, O. R. Holcomb; Judges of the Supreme Court, E. C. Million, Richard Winsor; Members of Congress, F. C. Robertson, J. T. Ronald.

The candidates of the Prohibition party were: For Governor, R. E. Dunlap; Lieutenant Governor, C. I. Hall; Secretary of State, J. W. McCoy; Treasurer, C. C. Gridley; Auditor, A. W. Steers; Attorney-General, Ovid A. Byers; Superintendent of Instruction, A. H. Sherwood; Land Commissioner, J. C. McKinley; Judges of the Supreme Court, Everett Smith, Thomas Young.

The Socialist-Labor party named: For Governor, — McCormick; Lieutenant Governor, Matt Matson; Secretary of State, William J. Hoag; Treasurer, Eric Norling; Auditor, F. B. Graves; Attorney-General, John Ellis; Superintendent, Raymond Bland; Land Commissioner, W. L. Noon; Judges of the Supreme Court, Frank Martin, D. M. Angus.

The Social-Democrats nominated: For Governor, — Randolph; Lieutenant Governor, E. S. Reinert; Secretary of State, James H. Ross; Treasurer, J. J. Fraser; Auditor, Charles S. Wallace; Attorney-General, David W. Phipps; Superintendent, John A. Kingsbury; Land Commissioner, Jerome S. Austin; Judges, J. H. May, W. H. White.

Gov. Rogers was re-elected, the vote standing: Rogers, 51,944; Frink, 49,860; Dunlap, 2,103; McCormick, 843; Randolph, 1,870.

For all the other State officers and for members of Congress the Republican candidates were elected. The Legislature elected has 26 Republicans in the Senate and 60 in the House, and 8 Democrats in the Senate and 20 in the House.

A constitutional amendment was submitted to vote at this election. It authorizes the Legislature to exempt from taxation \$300 of personal property for every head of a family. It was carried by a vote of 35,398 to 8,975.

The State voted for President as follows: McKinley, 57,456; Bryan, 44,833; Woolley, 2,363; Debs, 2,006; Malloney, 866.

WEST AFRICA. The west coast of Africa north of the Congo State and the regions of the interior as far as the Egyptian Soudan have been divided between France, Great Britain, and Germany, save the republic of Liberia, which has suffered encroachment at both extremities, the small Spanish and Portuguese settlements on the Guinea coast, and the arid region south of Morocco, to which Spain lays claim, although France has claimed the greater part of it.

French West Africa.—The French possessions were reorganized under the decree of Oct. 17, 1899, by placing the region of the middle Niger under a separate military administration and uniting the western part of the Soudan province with Senegal. By the convention concluded between France and Great Britain on June 13, 1899, the boundary between the British Gold Coast and the French sphere is fixed on the north at 11° of north latitude; the limit between Dahomey and the British colony of Lagos extends in a northerly direction till it strikes the Niger 10 miles above Gere, and from that point the line runs up the Niger 7 miles to the dry river bed called Dallul Mauri, up that to a point 100 miles from Sokoto, round the arc of a circle, keeping the same distance from Sokoto, to its second intersection with the parallel of 14° of north latitude, then due east for 70 miles, south to 13° 20' of north latitude, east again for 250 miles, then north to 14° of north latitude, and then east to the shore of Lake Chad. All the countries north and east of Lake Chad were recognized in another Anglo-French convention as belonging to the French sphere, as far east as the watershed of the Nile. France thus extends her recognized sphere over the whole of the Sahara and the Libyan desert, and includes in it the partly civilized kingdoms of Wadai and Bagirmi. The French Congo, which has a coast line on the Atlantic from the Congo to the German colony of Kamerun, is separated from the latter by a line following, with some deviations, the meridian of 15° east of Greenwich, and comprises all the interior north of the Congo and U'bangi rivers, merges in the new French sphere in the north. The French Congo, Dahomey, and Senegal all come together in the interior of the great shoulder of Africa and through the Sahara are connected with Algeria and Tunis.

The *French Congo* has an estimated area of 425,000 square miles and from 12,000,000 to 15,000,000 inhabitants. Libreville, the capital, has about 3,000 inhabitants. The Commissioner General is A. Grodet, and the Lieutenant Governor of the Congo under him is J. B. P. Lemaire. The budget for 1900 makes the income and expenditure each 5,576,000 francs. The imports in 1898 were 4,844,000 francs, of which 1,274,000 francs came from France; exports, 5,695,000 francs, of which 1,488,000 francs went to France. The postal traffic was 7,821 letters, etc., in the internal and 363,717 in the international service; receipts, 16,000 francs; expenses, 57,000 francs. Including the military territory and the protectorates of the Lake Chad region the jurisdiction of the Commissioner General extends over 1,160,000 square miles.

Dahomey, with its dependencies, has an area of 125,000 square miles and a population of about 1,000,000. Col. Liotard, the Governor, has his residence at Porto Novo. The budget of income and expenditure for 1900 was 2,200,000 francs. The imports in 1899 were valued at 12,348,000 francs, and the exports at 12,719,000 francs. The postal traffic in 1897 was 29,102 internal and 73,818 foreign letters, the receipts being 25,000 francs, the expenses 80,000 francs. Porto Novo

has 50,000 inhabitants, and Abomey, the capital of the Dahomey kingdom, has 15,000. The Fon negroes who inhabit the country are skilled in agriculture, raising manioc, yams, and corn, and obtain oil and cocoanuts from the forests. A joint commission met in February, 1900, on the Oupara river at its intersection with 9° of north latitude, the point up to which the boundary between Dahomey and Nigeria was settled, and proceeded to delimit the French and English spheres northward to Gere, on the Niger, according to the terms of the convention of June 14, 1898. They also fixed the position of the two enclaves on the Niger to be leased by England to France, one of them between Liaba and the confluence of the river Mussa, the other on one of the estuaries of the Niger.

French Guinea, including Futa Jallon, has an area of about 48,000 square miles and a population estimated at 1,000,000. Konakry, the capital, is on the isle of Tombo. The Governor is M. Ballay. The revenue raised locally was 1,571,000 francs and the contribution of France 224,625 francs. The imports in 1898 were 9,019,375 francs in value, 1,453,400 francs coming from France, and the exports were 7,799,975 francs, 420,725 francs going to France. A railroad from Konakry to the Niger has been begun. Earthnuts, rice, millet, gum, and rubber are the chief products, and the natives of Futa Jallon raise cattle. In 1899 the value of the imports was 15,442,000 francs, and of the exports 9,863,000 francs. Of the imports 1,621,000 francs came from France, which took 962,000 francs of the exports. Konakry was a free port until in January, 1900, an import duty of 5 per cent. ad valorem was imposed.

Senegal within its extended limits has an area of 200,000 square miles and a population of 1,180,000 without and 3,800,000 including the military territory of the Soudan. N. E. Ballay, the Governor of Senegal, with residence at St. Louis, is also Governor-General of West Africa. The receipts and expenditures of Senegal for 1900 were estimated each at 7,139,602 francs. The imports in 1898 were 33,156,000 francs in value; exports, 28,190,000 francs. Of the imports France supplied 28,190,000 francs, and of the exports 23,176,000 francs went to France. The post office handled 388,774 internal and 775,174 foreign letters, etc., in 1898. In Senegal there are 164 miles of railroad, and in the Soudan 98 miles.

The *Ivory Coast* colony has an area of 100,000 square miles, including the kingdom of Kong, and a population of 2,500,000. The local revenue, which sufficed for the expenditures, was 1,290,000 francs. The Governor, residing at Grand Bassam, is M. Robardeau. The imports in 1899 were valued at 6,390,000 francs, and exports at 5,863,000 francs. Of the imports 1,621,000 francs came from France, and of the exports 2,627,000 francs went to France. The natives grow corn and rice and gather rubber and cocoanuts. Coffee planting is successful.

The imports of the *French Soudan* in 1898 were valued at 10,730,000 francs, and exports at 3,627,000 francs. The administrative territory of the Soudan extends from the western part of the bend of the Niger, Lake Debo marking the boundary between it and the territory under the administration of the civil Governor at St. Louis, across the whole of Africa to the borders of the Nile basin, and from the Sahara southward to the northern limits of the Ivory Coast colony, the British Gold Coast, the German protectorate of Togoland, Dahomey, and British Nigeria. There are two military territories, the western one de-

pendent on Senegal and the eastern one on the French Congo. The area is roughly estimated at 300,000 square miles, with 2,500,000 inhabitants. Timbuktu, the chief town of the western section, has about 12,000 inhabitants, and is a trading center for all this part of Africa. There were 3,408 troops in 1900, of whom 2,750 were natives. The expenditure of France for the Soudan in 1900 was 6,833,000 francs. The local budget of income and expenditure was 3,238,500 francs. The chief imports are cotton goods, and the largest export is caoutchouc. The agricultural products are millet, rice, wheat, and earthnuts.

The Sultan Rabah, who defeated the Bretonnet party in 1899 and compelled M. Gentil to return toward the French Congo with the other half of the expedition, and who was himself defeated by the larger force, under Capt. Robillot, that the Commissary General of the French Congo sent with M. Gentil, fled northward to Dikao, the capital of Cobalo, with the remnant of his army of 12,000 men that remained faithful after the disastrous battle in which nearly a quarter of that army fell. The French could not reap the full fruits of their victory because half their own men were disabled. Their march to Lake Chad was postponed, and they remained near Kuna, awaiting re-enforcements, while their steamer was sent down the Shari to meet the mission of M. Foureau which had come across the Sahara, but halted in the desert on learning that Rabah dominated the shores of Lake Chad. The Sultan of Bagirmi, who had taken refuge at Lai when Rabah defeated his army and usurped his throne, joined Capt. Robillot at Tunia, and the Sultan of Goaurang and other Soudanese chieftains whose power had been shattered by Rabah joined hands with the French, who with a small detachment had beaten their former conqueror and destroyed his strong place, although his artillery was served by trained gunners and his soldiers were armed with repeating rifles and were experienced shots.

In April the three missions that were sent to Lake Chad in 1899—the Gentil-Bretonnet mission from the French Congo, re-enforced anew from its base; the Central Africa or Voulet mission, whose leader went mad and killed Col. Klobb, who was sent to supersede him, led afterward by Capt. Joalland, next in command to Capt. Voulet, in conjunction with Lieut. Meynier, who succeeded to the command of Col. Klobb's party; and the Foureau-Lamy mission from Algeria—effected a junction at Kussuri, and by direction of M. Gentil the combined force marched on April 22, under Major Lamy, against Rabah, who had reassembled an army and was preparing to attack the French. Rabah's troops were concentrated near the French fort, numbering 5,000 men, 2,000 of them armed with modern rifles, with 600 horses and 3 guns. The French column consisted of 700 men armed with rifles, 30 horsemen, 1,500 Bagirmi auxiliaries, and 4 guns. After an exchange of artillery fire the French stormed Rabah's fort of palisades and earthworks, and when his men scattered tried to cut off their retreat, which the Sofas endeavored to cover by resuming the offensive. Major Lamy and Capt. de Cointel were killed, and 18 men, and 3 officers and 5 men were wounded. Rabah's army was utterly routed, and he himself, helpless from wounds, was decapitated by a black soldier. The French placed Omar Ibn Ibrahim, of the former dynasty, on the throne of Bornu, the last one that Rabah, the former slave of Zobeir Pasha, had usurped. The shores of Lake Chad were found to be desolate because they had been ravaged and depopulated by Rabah's bands, but the valleys were found to be fertile. After the victory

the French column, under the command of Capt. Reibell, marched on Dikoa, where Fadifallah, son of Rabah, had rallied an army even stronger numerically than the one with which Rabah had marched against the French, consisting of 5,000 men armed with rifles and a large number of irregulars. This army fled, however, at the approach of the French column of 700 rifles, 100 Bagirmi horsemen, 3 Soudanese spahis, and 3 guns. Capt. Robillot occupied Dikoa, while Capt. Reibell with 160 men and 1 gun gave chase, and on May 2 captured Fadifallah's camp, together with stores, treasure, and ammunition after a sharp engagement. Another fortified camp was taken on May 7, and, Fadifallah's power having been broken, this column returned and was disbanded. During the rule of Rabah the trade between Bornu and Tripoli practically ceased, and that with the Central Soudan became precarious and intermittent. But the trade with Wadai, under the new Sultan Ibrahim, became active once more.

British West Africa.—The colonies of the Gold Coast, Lagos, Gambia, and Sierra Leone have their boundaries inland defined in the recent conventions, and Nigeria also has its limits fixed, though it extends inland to Lake Chad and includes extensive productive and populous territories and the navigable water ways of the lower Niger and the Benue.

The *Gold Coast* has an area of 40,000 square miles and a population estimated at 1,473,882, exclusive of Ashanti and Adansi. Accra has 16,267 inhabitants, and Cape Coast Castle 11,614. The principal products are palm oil and kernels, rubber, and gold, which is found in numerous places and is being mined with European capital. A railroad from Sekondi to Tarkwa is being built and has been surveyed to Kumassi, the capital of the Ashanti kingdom subjugated in 1896. By the convention concluded with Germany on Nov. 14, 1899, the disputed zone between the Gold Coast and German Togoland, which was held neutral pending a settlement, has been divided by a line following the course of the river Daka up to 9° of north latitude and then running northward with deflections that leave Maraprusi on the English and Yendi and Chakosi on the German side. There are 688 miles of telegraph. The Governor of the Gold Coast colony is Sir F. M. Hodgson, and the administrator of the northern territories is Lieut.-Col. H. P. Northcott. The revenue, £224,718 of it from customs, amounted in 1898 to £258,851, the expenditure to £377,976. An advance of £578,000 for railroads and £98,000 for harbor improvements was authorized in the colonial loans act of 1899. Previous to this none of the West African colonies had any debt. The value of imports in 1898 was £1,101,546, cotton cloth amounting to £230,641, spirits to £86,837, and tobacco to £21,725. The value of exports was £992,998, of which £551,667 stand for rubber, £114,288 for palm oil, £66,378 for kernels, and £63,838 for gold dust. The vessels entered and cleared during 1898 were in the aggregate of 1,122,016 tons.

The golden stool, which was the symbol of sovereignty in the kingdom of Ashanti, has never been seen since the downfall and imprisonment of King Prempeh in 1896. Prempeh before surrendering had two faithful servants bury it in the ground, probably also the royal treasure, which is supposed to be immense, and none besides them know the spot. When Sir Frederic Hodgson visited Kumassi city at the end of March, 1900, he found the people greatly excited, and learned that the cause was the discovery that some of the Kumassi chiefs had made or pretended to have

made of the golden stool. The search for the golden stool and for King Prempeh's buried hoard of gold has been going on ever since the British established themselves in Kumassi. Both natives and British officials have been active and persistent in the quest. When Sir Frederic Hodgson heard of the rediscovery of the golden stool he determined to get possession of it lest the Ashantis should set up a king and begin a serious rebellion. He determined also to get the royal hoard if it was found. He heard that the natives had twice sent money to Prempeh in Sierra Leone, and warned them that if they did it again their former king would be taken farther away. He called for the payment of 50,000 ounces of gold that the British Government had demanded in 1874, to which the cost of the expedition of 1896 would be added, and he peremptorily demanded of the chiefs the delivery of the golden stool, on which he should sit as the representative of the British Crown. When the chiefs failed to bring him the golden stool the Governor sent out detachments to search for it. The natives organized parties that resisted and attacked the detachments, killing some of the men and wounding others. Then the Governor, sending for re-enforcements, which speedily arrived, attempted to arrest some of the chiefs as ringleaders, upon which the whole Kumassi tribe rose in rebellion. The Governor retired to the strong stone fort that the British had built when they first occupied the country. It was armed with 6 7-pounders and 4 Maxims commanding the town, and was defended by 300 Hausa soldiers, having provisions for three months. The nearest British posts on the north were Kintampo, 100 miles, and Gambaga, 340 miles away, and the march from the coast was over 100 miles through a continuous morass, for it was the rainy season, when native troops could move but slowly and European troops not at all. In addition to the West African frontier force, numbering at the time over 4,000 men, the greater part of them stationed in Nigeria, there was an armed constabulary of 1,300 men in the Gold Coast colony, one of 800 Hausas under 20 British officers in Lagos. By orders from England 300 of the frontier force were sent from Nigeria overland through the Gaman country to the relief of the Kumassi garrison and 200 more by way of Forcados to the Gold Coast. A contingent of the Lagos constabulary set out at once when news of the siege arrived. From Sierra Leone 52 of the frontier force and 250 Hausas were sent later. Major A. Morris, commissioner of the northern territory, commanding the garrison at Gambaga, started on April 18, when he received an appeal from the Governor for aid, with his whole force of Hausas, Moshi cavalry, and native auxiliaries, and at Kintampo he picked up the detachment stationed there, so that his force consisted of 7 white officers, 230 noncommissioned officers and men, and native levies, with machine guns.

When the insurrection began many of the people took the side of the British, and there was fighting among the tribes before the rebels became strong enough to lay close siege to the fort. The Bekwais, whose country lies next to that of the Kumassis on the side toward the coast, undertook to keep communications open, but ceased aggressive acts when the Kumassis came and killed 500 of their number. On April 23 Capt. Parmenter, who commanded the garrison, sent a force to clear the way to the eastward which killed a great many rebels, but two days later they closed in on the fort, and began to build a ring of stockades around it, which were made proof against the light ordnance with which it was armed by means of earth embank-

ments. They first made a determined attack on the town in such strength that the Hausas were driven from their cantonments and compelled to concentrate round the fort. The garrison lost heavily, while inflicting on the rebels losses so severe that in spite of their numerical superiority they remained on the defensive thenceforth, camping behind the stockades that they erected and gradually strengthened, and keeping the Hausas closely confined within their own works. The besiegers numbered about 10,000, many of them good marksmen with their breech-loading rifles, for which they made cartridges themselves that were destructive in their effect. The line of intrenchments held by the Hausas surrounded the fort at a distance of 300 yards. The Lagos constabulary entered the fort on April 30, after two days of severe fighting, in which they had 135 casualties. The Ashantis, 8,000 strong, had erected a stockade across the road at Asagu, 2 miles from Kumassi, which they defended with pertinacity with their native weapons and some rifles. The Kumassis were joined in the rebellion by the Unansis, Ofensus, Atchumas, Beposus, Ajasus, Nkoranzas, Mampons, Neutas, Kokofus, Abadones, and Asuatuns, all determined to throw off the British yoke and able to muster 50,000 fighting men.

Major Morris sent messages to the Nkoranzas, before resuming his march from Kintampo on May 9, to induce them to remain loyal. When he reached their town he found that the Ashantis had come and seized the King to compel him to take their side, but that the King's sister had persuaded him still to hesitate, and thus the adherence of this powerful tribe was secured by the fortunate arrival of the British force at that moment. The Ashantis contested the way from that point. At Sekedumassi the relief column encountered the enemy, who made an ambush in the tall grass, from which they were easily driven by the machine guns. The British force marched so rapidly that the Ashantis were not well prepared. Every town and village that the British passed through they burned. Most of them were deserted, the Ashantis falling back to concentrate near the capital. On May 14 the native auxiliaries walked into an ambush. There was incessant fighting on May 15 as the force approached the capital. The Ashantis had prepared a strong stockade across the road, which was carried after a cannonade by a charge in which Major Morris, leading his men, was wounded badly: but from a hammock he continued to direct the operations. A second stockade, 6 feet high, on which the 7-pounders made little impression, was likewise taken by assault, and the advance of the Hausas was so rapid that the Ashantis were disconcerted and did not defend their third and strongest stockade. A further march of 10 miles brought them to the line of stockades with which the Ashantis had invested the fort. There were none of the enemy at the particular stockade encountered, and in the evening the relief force marched into the fort without further opposition, having in the day's fighting killed several hundred Ashantis, including some important chiefs.

The town was invested on every side with a circle of very strong stockades with a radius of a mile, each one facing the fort, 6 feet in height, and loopholed at the top. They were made of heavy timbers banked up with earth, each connected with the next ones by paths, so that every fort could be quickly re-enforced. Other columns endeavored to press on to the relief of the garrison when it became known that it was short of provisions, but the Ashantis resisted the ad-

vance of the different detachments with great pertinacity. Capt. Hall with the first detachment of the relieving force got as far north as Esameja, 16 miles from the capital, and was forced to retire when he found Kokofu on his right flank held by 8,000 Ashantis. Col. Burroughs, on attempting to advance by way of Kokofu, lost 72 men killed or wounded, and had likewise to fall back. The advance detachments of Col. Willcocks's force were accompanied by thousands of native auxiliaries. Capt. Hall went to Bekwai with his force, Col. Carter followed to Kwisa, and Capt. Melliss halted at Fumsu, having found his way blocked by rebels who gave him a hard battle at Dunpoassi. The rebels took the offensive against the advanced guard and several severe battles were fought. Col. Carter was compelled to fall back from Kwisa. The loyal Bekwais alone stopped the advance of the rebels.

The arrival at Kumassi of Major Morris and his men gave to the garrison an able commander and an accession of brave soldiers, but this was not sufficient to raise the siege, and only added to the difficulties of the situation, because ammunition and food were running low. Reconnoissances in force revealed the enemy in strong force at every stockade that was attacked. Relief from the coast was constantly expected, but when rations were reduced until the soldiers got only a biscuit and a half a day and five ounces of meat, when the native traders who obtained 10s. apiece for biscuits and £3 for a can of corned beef had no more to sell, and when 30 or 40 of the native civilians and camp followers died daily of starvation, the situation became desperate. Major Morris directed the reconnoissances to the discovery of a track by which he could get out of town. On June 23, when there were only three days' minimum rations for the entire garrison left, he led the greater part of the besieged out in a heavy mist at early dawn. The force was 600 Hausas of all ranks, with 800 noncombatants, escorting the Governor and his wife and the other British civilians, and followed by 1,000 native civilians. One of the stockades was forced by hard fighting, and during the day's rapid march of 18 miles bands of Ashantis were encountered continually. The march through swamps and deep rivers was more deadly than the enemy after the first two days. Major Morris managed to throw the pursuing Ashantis off the track by making a rapid march to the west after deluding the besiegers into the belief that he intended to strike for the coast by the direct route. The carriers lost their loads, and every one was near a collapse when the column reached Cape Coast on July 11. During the march the casualties were 2 officers killed, 1 wounded; 80 men killed, and 37 wounded.

The force left to hold the fort under Capt. Bishop was 100 men with provisions for twenty-four days. The advance of the main relief column under Sir J. Willcocks was extremely arduous and slow, as the rivers were in flood and rains were incessant. Before he encountered the enemy in force Col. Willcocks knew of the departure of the Governor, and could plan his march so as to reach Kumassi before the food in the fort was entirely exhausted. Col. Willcocks could not start from the coast until he had enough carriers. Thousands were sent from Sierra Leone and other colonies, but thousands more were needed to transport the stores and ammunition. The natives of the Gold Coast refused to go at any price. The labor ordinance requiring them to work for the Government was put into force. The men then ran away, and the authorities impressed the wom-

en into the service. The main force did not set out until June. The chiefs of all the loyal tribes were required to put as many levies into the field as they could raise. The force that advanced on Kumassi under the immediate command of Col. Willcocks was composed of 700 Yorubas and Hausas of the West African frontier force, 230 of the West African regiment from Sierra Leone, and 49 of the frontier police, with 3 15-pounder and 4 7-pounder guns and a plentiful equipment of Maxims. There were also 200 natives allies, who were to act as scouts, but their guns were taken away from them because when they first saw the enemy they fired wildly among the carriers in their excitement. Col. Willcocks deceived the enemy by spreading a report that he intended to march through Kokofu, northeast of Kumassi, and would attack that place on July 13. This drew a large part of the rebel force in that direction, and they were building stockades in the paths on that side while he took his column 15 miles to the west, and marched upon Kumassi by way of Ekwanta. Before entering the hostile district his road went through the country of the Bekwais, old enemies of the Kumassis, without whose aid the British could not have accomplished their purpose. The march into the enemy's country was made in a torrential rain through swamps where the water was waist-deep. The hostile villages were taken at the point of the bayonet. There was no severe fighting until the stockades guarding the approach to Kumassi were reached, built directly across the path, yet hidden in the trees, having pits behind them in which men reloaded the rifles of the combatants who lined the breastworks, and having paths leading back into the jungle to afford a safe line of retreat. The bush was so dense that the men had to cut their way through with *machetes* in order to charge. When the British commander succeeded in locating the first of the hidden stockades and opened fire with his guns, the rebels replied from every direction with rifle fire. They had places built high in the trees to fire from. They had also felled trees and placed brush entanglements to impede the advance of the British troops, but their fire was not destructive, because as soon as it opened from any quarter the Maxims soon cleared the place of rebels. Four such stockades along the road and one large one across the road were taken by successive charges after a heavy bombardment, and the shells had done such terrible work that no one opposed further the entry of the relieving force, which Col. Willcocks led into the fort at sunset on July 15, the very day that he had promised. Out of 3,400 native soldiers employed during the hostilities 850 and out of 200 British officers 55 were killed or wounded.

Col. Willcocks left 150 men in the fort and brought away the sick and famished garrison that could not possibly have resisted an onset of the Kumassis if these had attacked. From his base at Bekwai he sent Col. Morland, on July 21, with 800 men to take Kokofu. The place was surprised and the stockade carried without loss. On Aug. 4 he dispatched 750 troops to Kumassi to destroy the stockades near the town. When the road was opened between Bekwai and Kumassi flying columns were sent out in various directions, which scoured the country and cleared away all signs of hostility for miles about Kumassi. Capt. Wilcox met with a check early in September near Bohankra, 15 miles east of Kumassi, which was retrieved by Major Reeve, who with 400 men inflicted punishment on the district. The Offensives tried to surround the force sent to occupy their

town. At the end of September Col. Willcocks dispersed a force of 4,000 rebels northwest of Kumbasi which fought with desperate courage, giving way only after three bayonet charges. This was the last considerable rebel force still in the field, and when it was broken up by Major Cobbe, who chased the rebels beyond the Ofin river, the work of pacification became easy.

Lagos lies between Southern Nigeria and the French colony of Dahomey. The colony proper has an area of 985 square miles and 85,607 inhabitants. The Lagos protectorate, including the Yoruba country, has about 21,000 square miles, with 3,000,000 inhabitants. The principal products are palm oil, palm kernels, rubber, ivory, gum copal, cotton, cacao, and coffee. Spirits, cotton goods, tobacco, and hardware are imported. There is a railroad from the town of Lagos to Abeokuta, 60 miles, and it is being continued to Ibadan. The Governor is Sir William McGregor. The revenue collected in 1898 was \$206,444, of which £170,792 were derived from customs; expenditure, £203,803. The value of imports was £908,351, of which £339,779 were for cottons, £77,062 for spirits, and £21,043 for tobacco. The value of exports was £882,329, of which £362,539 represent palm kernels, £97,337 palm oil, and £285,410 rubber. The tonnage entered and cleared during 1898 was 822,378 tons. An advance from the British Government of £792,000 for railroad construction was authorized by Parliament in 1899.

Nigeria has an area of about 400,000 square miles and perhaps 30,000,000 inhabitants. There are populous towns, such as Kano with 100,000, Ilorin with 50,000, Yakoba with as many, and Bida with 90,000 inhabitants. The territory is divided for administrative purposes into Northern and Southern Nigeria by a line running from Owo east to Ashaku. The import and export duties levied by the Royal Niger Company have been abolished since the territories passed into the control of the Crown. The revenues for the northern territory will be apportioned by the Ministry of the Colonies in London from those collected in Southern Nigeria and in Lagos. In 1899 the revenue of the Niger Coast protectorate, since merged in Southern Nigeria, amounted to £169,568, of which £160,753 came from customs. The value of imports was £732,640, and of exports £774,648. The number of vessels entered was 379, of 559,912 tons, and cleared 375, of 551,555 tons. Northern Nigeria embraces the Fula empire of Sokoto, with the tributary sultanates of Gandu, Kano, Katsena, Banchi, Bakundi, Donga, Takum, Muri, Zaria, Ilorin, Nupe, and the British part of Adamawa; also a large part of the former kingdom of Bornu and of the Borgu group of pagan states. The Hausas, who form a majority of the population, though subject to the Fula rulers, have long been sought as soldiers by the European administrations in Africa. The people of these Mohammedan states possess a considerable degree of civilization, and are especially skilled in growing and weaving cotton and in curing leather. They raise also a desirable kind of indigo. The Hausas are the traders of the country, and send their caravans northward to Tunis and Tripoli and eastward to Egypt. The British maintain 2,500 native troops in the country under the command of Col. Willcocks. The High Commissioner of Northern Nigeria is Brig.-Gen. F. J. D. Lugard. Southern Nigeria, inhabited by pagan tribes, produces or exports palm oil and kernels, ivory, rubber, ebony, camwood, indigo, gum, barwood, and hides. A military force of 800 native soldiers is maintained. The High Commissioner is Sir R. D. R. Moor, and the Deputy Commissioner is Major H. L. Gall-

wey. The Royal Niger Company had an ordinance forbidding the sale of spirituous liquors north of 6° 12' of north latitude. The British Government maintains the prohibition for Northern Nigeria, most of whose inhabitants are Mohammedans, and intends to establish a zone between 7° of north latitude, the boundary between the northern and southern territories, and 6° 12' within which spirits may be sold but not stored in large quantities, the object being to prevent any smuggling into Northern Nigeria.

The occupation and subjugation of Nigeria was prosecuted vigorously after the Imperial Government had taken the direction of military affairs from the Royal Niger Company and collected a large force to oppose the extension of the French sphere into the region of the middle Niger. In 1899 the towns in the Kwo Ibibio country made their submission after 19 of their number had been destroyed. The resistance of the chiefs in the Benin territory was broken by the occupation of Benin city, the occupation of 4,000 miles of territory and burning of rebellious villages, and the capture and execution of Ologboshi, the leader of the hostile chiefs. In 1900, though amicable relations with the Sultan of Sokoto and the Fulani chiefs were cultivated, the British still encountered much opposition to their occupation of the country, which they endeavored to break down by punitive expeditions. In extending the telegraph from Lokoja up the Benue river to Ibi the troops were attacked by the Munchi people, who killed several European officers and soldiers as well as native soldiers, and were not brought to submission until considerable re-enforcements arrived to punish them. Parties were dispatched by Gen. Lugard in various directions to seek a healthy site for the seat of the new Government, the valleys of the Niger and its principal tributaries being very unhealthy. One of them, commanded by Lieut. Monck-Mason, which explored the Gurara river, was attacked and several casualties occurred, the leader himself being wounded. The columns led by Col. Morland up the Kaduna tributary of the Benue and by Lieut.-Col. Lowry Cole up the Kwokwana tributary on their return united in an expedition to punish the troublesome pagan town of Limu, and met with heavy fighting, in which most of the Europeans were wounded before the town was taken.

The West African frontier force that has been organized to establish British rule throughout Nigeria consists of 2 battalions of infantry, 3 batteries of artillery, 1 company of engineers, with a telegraph section, and an admirably equipped hospital service. The rank and file are drawn in about equal numbers from the Hausa and Yoruba tribes, with a sprinkling of Nupe. Jebba, 500 miles up the Niger, was made the headquarters, but nearly half the force was stationed at Lokoja, 200 miles farther down, where the Niger is joined by the Benue. A battalion consists of 8 companies of 150 men, each having 3 British officers and 5 British noncommissioned officers, with a Maxim and gun detachment, the men being armed with Lee-Enfield carbines. Two of the batteries consist each of 4 7-pounder guns and the third of 6 Maxim-Nordenfelts. Col. Willcocks is in command of the entire force, and each battalion is commanded by a lieutenant colonel. Other divisions of the West African frontier force are assigned to the other possessions, the total strength being 5,400 men, of which number 2,500 are allotted to Northern Nigeria, 1,000 to Southern Nigeria, 700 to Lagos, and 1,200 to the Gold Coast colony and protectorate. The political and territorial powers of the Royal Niger Company were transferred to the British

Crown on Jan. 1, 1900. A part of the territories previously administered by the chartered company were attached to Lagos protectorate. The rest was amalgamated with the Niger Coast protectorate, and divided into Upper and Lower, or Northern and Southern, Nigeria—Lower Nigeria administered by Sir Ralph Moor, with the title of High Commissioner; Upper Nigeria, including the kingdom of Sokoto, the subjugated state of Nupe, and the healthy districts north of the lower Benue, administered by Gen. Lugard as British High Commissioner. The British Government paid to the bondholders of the Royal Niger Company £120 for each £100 of stock, or a sum of £300,000, and to the shareholders £150,000 for land and mining rights and compensation for interruption of business, £300,000 in repayment with interest of sums advanced by the company in excess of revenue to develop the territory, and £106,895 for stores, buildings, steamers, etc., making a total of £856,895. The company retained some of its stations and a part of its fleet of river steamers and prepared to carry on its commercial operations as before, relieved of the expense of political administration and military protection, but deprived of the monopoly of trade, which, however, it sought to perpetuate by taking in other companies and firms trading in Nigeria.

The rebellion of the Ashantis of the Gold Coast protectorate had a disturbing effect throughout West Africa. In Nigeria it roused a dangerous temper among the Fulas, whom as the ruling caste the British have taken great pains to conciliate. Bishop Tugwell with 5 companions and a caravan of 200 carriers was on the way to Kano, the capital of Hausaland, when the Ashanti outbreak occurred, and 500 of the Nigerian division of the West African frontier force were dispatched to the relief of the British besieged in Kumassi. At Ilorin and other places the native potentates received the English party with honors, and at Zaria the local chief treated them hospitably, but at Kano they were ordered by the king to leave his country on pain of death, and when they reached Zaria on the way back the chief was no longer friendly. The Emir of Sokoto refused to allow the British to erect a telegraph in his dominions. Kontagora, who calls himself King of the Soudan, was openly hostile, and sent his horsemen to attack British detachments whenever they approached his country.

Sierra Leone, lying between Liberia and French Guinea, has an area of about 4,000 square miles and 74,835 inhabitants, more than half of whom are Christians, many of them descended from liberated West Indian slaves. In the schools there are over 6,000 pupils. Palm oil and kernels, earthnuts, benni seed, kola nuts, rubber, gum copal, and hides are exported. A railroad from Freetown, the capital, to Songotown, 30 miles, is continued 30 miles farther to Rotofunk, and will be extended onward to the confines of the protectorate, which has an area of 30,000 square miles and about 375,000 inhabitants. The Governor is Sir Frederic Cardew. The revenue in 1898 was £117,682, of which £89,524 came from customs; expenditure, £121,112. A loan of £310,000 from the British exchequer has been authorized for railroad construction. The imports in 1898 amounted to £606,349, of which £134,674 were for cotton cloth, £23,639 for spirits, and £18,724 for tobacco. The value of exports was £290,991, of which £112,063 represent palm kernels, £32,504 rubber, and £49,671 kola nuts. The vessels entered and cleared in 1898 had an aggregate tonnage of 1,110,228 tons. In the spring of 1900 a rising of the Yonies in the Ronietta district had to be put

down by a detachment of the West African regiment. In September a disturbance occurred in the Karene district of the protectorate, provoked by the conduct of an officer of the frontier police. In November Sir Frederic Cardew, whose policy caused the insurrection of 1899, retired and was succeeded as Governor by Sir C. King-Harman. The imposition of a heavy hut tax on the natives of the protectorate who had only recently been brought under British control, and also the mode in which it was collected, was the cause of the rising and massacres, and it was so reported by Sir David Chalmers, who went out as royal commissioner to investigate the charges against the Governor and the district commissioners. The Secretary of State for the Colonies did not act at the time upon the findings of the royal commissioner because they contained serious accusations against public officials, but after a sufficient interval Sir Frederic Cardew was replaced. He had imposed the hut tax with the approval of the Colonial Office in order to raise the money within the colony and protectorate to support the force of frontier police that was organized primarily to counteract the military power of France in the *Hinterland* and bring as much territory as possible under British influence. The arbitrary conduct of the district commissioners, who are chiefs of the frontier police as well as judicial officers, having the power to inflict capital punishment, although not men of legal training, continued to give occasion for complaints, as also the conduct of the frontier police, composed entirely of natives, many of whom had been slaves of the chiefs whom they arrested and accused.

Gambia has an area of 69 square miles and 14,300 inhabitants within the colony, Bathurst, the capital, having 6,000; and the protectorate has an area of 2,700 square miles and 200,000 inhabitants. The exports are earthnuts, hides, beeswax, cotton, and rubber, and the natives cultivate also corn and rice. The Administrator is Sir R. B. Llewelyn. The income in 1898 was £46,718, and expenditure £29,035. The revenue from customs was £33,762. The value of imports was £246,092, of which £60,787 were for cotton cloth, £4,373 for spirits, and £7,190 for tobacco. The exports were £247,832 in value, the chief articles being earthnuts for £200,309 and rubber for £30,468. The vessels entered and cleared during 1898 had an aggregate tonnage of 328,145 tons. In June, 1900, the Mandingoes attacked two British traveling commissioners on the banks of the Gambia river, and killed them and their escort.

German West Africa.—The German possessions are Kamerun and Togoland, both declared German protectorates in 1884. Kamerun has an area of about 191,130 square miles, with 3,500,000 inhabitants. There were 348 German, 36 English, and 39 other white residents in the middle of 1899. In a botanic garden at Victoria experiments are made with economical plants of the tropics with a view to introduce cultures suited to the climate. Plantations of cacao, coffee, and tobacco have been started. The value of imports in 1899 was 10,638,955 marks. The exports amounted to 5,145,822 marks, the principal articles being palm kernels for 1,365,608 marks, palm oil for 893,361 marks, gum for 1,928,080 marks, ivory for 598,471 marks, and cacao for 813,115 marks. The imports consist mainly of cotton cloth, spirits, salt, and hardware. During 1899 the number of vessels that visited the ports was 66, of 81,891 tons. A district of 34,000 square miles in the northwest has been conceded to the Northwest Kamerun Company authorized to promote immigration and to carry on agricultural,

mining, and trading enterprises. Gold and iron are known to exist. The revenue in 1899 was 1,713,000 marks, including a contribution from the Imperial Government. For 1900 the revenue was estimated at 3,245,000 marks. The imperial contribution was 2,063,000 marks, and the local revenue was 1,000,000 marks from customs, 32,000 marks from direct taxes, and 150,000 marks from other sources. For 1901 the Reichstag has voted 1,197,700 marks as the imperial contribution. The Governor in 1900 was J. von Puttkamer. The Imperial Government has given little financial aid of late years to Kamerun, and has kept only a small garrison there. Having determined that the protectorate must pay its own way, it adopted the policy of concessions to syndicates, to which the smaller capitalists who had invested money there objected. An increase in the import duties made in 1899 was also a discouraging circumstance. German planters had invested 8,000,000 marks, and have had success with cacao, with coffee on the slopes of the Kamerun mountains, and with tobacco. Their trouble has been to obtain laborers; 8,000 are needed, and only 4,000 have been found, and most of these are brought from Liberia, Lagos, and Togoland. The Kamerun natives cost less if they can be induced to work. Revolts occurred in 1900 that made it impossible to get any. An expedition was sent to Adamawa in 1899 to protect the tribes in the center from attack, and while the troops were away the Bali tribe, from which laborers had been recruited, rose in rebellion and destroyed the Catholic mission at Kribi on the coast. In the northern part of the colony all plantations had to discontinue work because no laborers could be obtained in consequence of the destruction of a weak military post by hostile natives. An expedition to the north was first sent out under Capt. von Besser in order to punish the Bangs tribe for murdering the explorer G. Conrau and Lieut. von Queis, who had been left in command of a station and to establish German authority in the region where the new Northwest Kamerun Company had begun operations. The Bali insurrection shut out from the coast the Yaunde people, who were accustomed to bring rubber to the merchants and hire out to the planters for a term before their return, and also the capable Tikar people, who had begun to come down from Adamawa. Capt. von Dannenberg, temporarily commanding the forces, had not men enough left to punish the Bali. The Reichstag voted in favor of adding 100 men to the colonial troops, and the Imperial Government arranged in the budget for the addition of 500 more, raising the total strength from Jan. 1, 1901, to over 1,000 men. The recruiting of labor in Liberia was made difficult and expensive by a tax imposed by the Government of the republic on all laborers who emigrate. The Governor of Togoland stopped the supply even from a German possession, forbidding the emigration of laborers, but after a conference of persons interested in Kamerun plantations held in Berlin at the invitation of the Government Dr. von Bucka, the director of the Colonial Department, abrogated the decree. Harsh treatment of natives on the plantations was alleged as one cause of the difficulty of obtaining labor in the back country, and excesses of the troops were said to be one cause of the native risings. Major von Kamptz, the commandant, when he returned to Kamerun recalled Capt. von Besser because he was charged with having committed excesses in his punitive expedition.

Togoland has an area of 33,000 square miles

and a population estimated at 2,500,000. There were 118 Europeans in 1899. The revenue for 1900 was estimated at 750,000 marks, of which 20,000 marks came from direct taxes, 425,000 marks from customs, 35,000 marks from various sources, and 270,000 marks were contributed by the Imperial Government. The expenditures were 311,650 marks for salaries, 228,720 marks for materials, and 550,000 marks for public works. The Governor is M. Köhler. The imports in 1898 were 2,490,925 marks, and in 1899 they were 3,279,708 marks; exports in 1898 were 1,470,454 marks, and in 1899 they were 2,582,701 marks. The military force consists of 250 native troops with German officers. Palm oil and kernels and gum are the chief exports. Palms have been planted in great numbers, and also coffee shrubs and gum trees. Cattle have been introduced in the hilly back country. In 1899 the number of vessels that visited the ports was 95, of 110,241 tons. Arrangements were made in November for the partition of the neutral zone of Salaga between Togoland and the British Gold Coast colony. Germany laid claim to the greater part of this region, but agreed to divide the territory in accordance with the British claims and desires in consideration of the relinquishment of the British treaty right to the joint control of Samoa with Germany and the United States.

Spanish West Africa. — Apart from the islands of *Fernando Po*, *Annabon*, *San Juan*, and *Corisco*, in the Bight of Biafra, Spain possesses territory on the mainland, and has claimed the whole coast line from the Campo river in the north nearly down to the Gabun river, known as the *Muni* territory, although France has always disputed this claim and has asserted authority in these regions, while Spain has done little in the way of effective occupation. Spain has also since 1855 asserted a protectorate over the coast south of Morocco from near Cape Juby, opposite the Canary Islands, to Cape Blanco on the south, the region known as the *Rio de Oro* protectorate. No limits were laid down to the extension of the protectorate in the interior, and when the doctrine of *Hinterland* was accepted in the agreements between France, Germany, and Great Britain, it was assumed by Spain that her claim extended indefinitely inland, and asserted a protectorate, which was not made effective, over the *Adrar* country lying back of the coast. France, however, contested this claim, has made many sacrifices in order to bring under her dominion the whole Sahara, and has always contested the Spanish right to a *Hinterland*. An agreement was reached early in July, 1900, between the French minister and the Spanish ambassador in Paris which brought to a close the long-standing disputes. In return for concessions on the Guinea coast Spain gave up her pretensions in the western Sahara, abandoning all claim to *Adrar* and accepting a line between the Spanish and French spheres of influence in northwest Africa to be drawn in such a manner as to leave the *Sebkha Ijil*, a saline lake less than 200 miles from the coast, within the French sphere. Of the *Rio de Oro* and *Adrar* protectorates, 243,000 square miles in extent, Spain retains less than 100,000 square miles, and renounces the prospects of extending her influence from the insignificant points on the coast where Spanish authority is now exercised. These settlements are under the control of the Governor of the Canary Islands, which are considered for administrative purposes a part of Spain.

In the south Spain claimed a territory in the *Rio Campo* and *Muni* valleys of 69,000 square

miles, containing 500,000 inhabitants, and regarded as an exceedingly fertile and promising region. France was unwilling to recognize any of it as Spanish except the trading posts opposite Corisco. As compensation for the concessions in the northwest France now concedes only a fraction of the Spanish pretensions in the Muni district, but still a considerable tract of country which is capable of commercial development. The coast line, about 75 miles in length, from the Campo river, the southern boundary of German Kamerun, to the Muni river, is conceded to be Spanish, and inland the line is drawn about 10° 30' east of Greenwich, giving a breadth of about 110 miles to the Spanish possession, which has thus an area of over 8,000 square miles, and is known as a fertile agricultural region through which the river Benito flows. The agreement provides that France is to have the right of pre-emption should Spain at any time decide to alienate the territory, while Spain has a similar right of pre-emption over the Adrar country. Near Cape Nun Spain has a settlement called *Ifni*, inclosed inland by British territory and having an extent of only 27 square miles and 6,000 inhabitants.

Portuguese West Africa.—South of the Congo Portugal possesses the old colony of *Angola*, having a coast line of 1,000 miles extending from the Congo to the Cunene, the two rivers dividing it respectively from the Congo State on the north and German Southwest Africa on the south, and stretching inland to the borders of the Congo State and British South Africa. The total area is 484,800 square miles, and the population is estimated at 4,119,000. A military force of 4,010 men, of whom 2,858 are natives, is maintained to preserve order. The revenue for 1900 was estimated at 1,673,111 milreis, and expenditure at 2,013,671 milreis. The imports in 1897 were 6,380,368 milreis, and exports 6,577,791 milreis. There are 244 miles of railroad and 807 miles of telegraph line. The ports of Angola were visited in 1897 by 615 vessels in the foreign trade, of 1,053,248 tons, and 2,547 in the coasting trade, of 70,743 tons. Coffee, rubber, wax, oils, cocoanuts, ivory, cattle, and fish are the important products, and sugar is grown from which rum is distilled. Gold has been discovered, as well as copper, iron, petroleum, and salt, and the Mossamedes Company, composed of German capitalists, has a concession for mining, breeding cattle, and colonization in a vast healthy tract in the interior. *San Thomé* and *Príncipe* are salubrious volcanic islands in the Bight of Biafra on which creole planters raise cacao, coffee, and cinchona. Their area is 360 square miles, with a population of 24,600. The revenue for 1900 was estimated at 404,196 milreis, and expenditure at 322,732 milreis. The imports in 1898 were 1,663,914 milreis, and exports 2,536,978 milreis, including 1,825,776 kilogrammes of coffee, 8,323,057 kilogrammes of cacao, and cinchona bark valued at 29,686 milreis. The *Cape Verde Islands* are inhabited by a colored race descended from Portuguese settlers and negroes from all parts of the Guinea coast. The area is 1,480 square miles, and the population is 114,130. The revenue for 1900 was estimated at 364,129 milreis, and expenditure at 319,941 milreis. Imports in 1898 were valued at 1,558,047 milreis, and exports at 194,608 milreis. The products are coffee, medicinal drugs, and millet. The islands were visited in 1898 by 3,225 vessels, of 3,365,137 tons. *Portuguese Guinea* is surrounded on the land sides by French Guinea and Senegal. The capital is on the island of Bolama. The area, defined in the convention with France signed in

1886, is 4,440 square miles, and the population is about 820,000. The commercial products are rubber, wax, oil seeds, ivory, and hides. The revenue for 1900 was estimated at 56,655 milreis, and the expenditure at 216,742 milreis. The value of imports in 1898 was 458,566 milreis; exports, 223,136 milreis.

WEST INDIES. The West Indian islands are colonies of European powers with the exception of the large islands of Hayti-Santo Domingo, Cuba, and Porto Rico. Their population consists of the descendants of former negro slaves, with a sprinkling of white creoles, who have in recent times declined in numbers through emigration. The islands have gone through a long depression, due to the competition of European beet sugar with cane sugar, which is still their principal product, though on some of the islands it has been replaced by other crops. Great Britain imported from the British West Indies in 1898 sugar for £232,378, rum for £106,223, cacao for £446,498, and dyewoods for £33,820, all imports amounting together to £1,283,413, while British exports to the islands were valued at £1,839,980, the chief articles being cotton goods for £450,244, clothing for £203,533, leather and leather goods for £93,433, iron goods for £119,534, fertilizers for £76,103, and machinery for £44,210. Flour and provisions are imported into the West Indies from the United States and jerked beef from the Argentine Republic and Uruguay. Of 9,167,767 tons of shipping entered and cleared in 1898 at British West Indian ports 7,239,354 tons were British. In consequence of the economical crisis in the British West Indies, aggravated by destructive hurricanes in the cases of Barbadoes and the Windward Islands, the British Parliament in 1899 authorized advances from the treasury amounting to £663,000, of which £150,000 were loaned to Jamaica to cover deficits and £303,000 to construct public works and railroads, £110,000 were allotted to Trinidad for railroads and public works, £50,000 go to Barbadoes to repair the damages of the hurricane, and £50,000 for the same purpose to St. Vincent. A royal commission appointed to inquire into the condition of the sugar-growing colonies recommended these loans for temporary relief. The conclusion of the commission was that there is danger of reduction and even of extinction of the sugar industry from the competition of bounty-fed sugar, and yet in many of the islands there is no other industry that could profitably take its place.

British Colonies.—The largest of the British islands is *Jamaica*, which has 4,424 square miles, including Turks and Caicos Islands, the Caymans, and the Morant and Pedro Keys. The area of Jamaica itself is 4,193 square miles. The population in 1899 of Jamaica was 730,725; of Turks and Caicos Islands, 5,482; of the Caymans, 4,322. There are 635 miles of telegraph on the island of Jamaica, and 185 miles of railroad. The Governor is Sir Augustus Hemming. The Legislative Council contains 5 official, 6 nominated, and 14 elected members. Kingston, the capital, has 46,542 inhabitants. The white population of the colony in 1891 was 14,692. In 1896 there were 14,118 East Indian immigrants settled on the island, including 1,562 indentured laborers. Immigration was suspended in 1886, but in 1891 it was resumed. There were 893 public schools in 1899 with 96,252 pupils enrolled and 56,853 in average attendance. The British garrison in 1899 numbered 1,620 officers and men; the Jamaica militia, 761. The cultivated area in 1898 was 660,491 acres, of which 164,307 were tilled and 373,048 were pasture. Sugar cane covered 27,123

coffee 22,901, bananas 23,405, cocoanut palms 11,293, cacao 1,527, ground provisions 77,271, Guinea grass 123,136, pimento and pasture 62,418, pimento alone 4,993 acres. The shipping in 1898 consisted of 134 sailing vessels, of 9,226 tons. In Turks and Caicos Islands there were 46, of 6,080 tons. The number of letters and postal cards sent through the post office in 1899 was 4,791,102; the number of telegraph messages, 97,368. The revenue of Jamaica in 1898 was £748,514, and expenditure £752,742. Of the revenue £336,398 came from customs. The chief expenditures were £107,315 for debt charges, £61,150 for police, and £60,405 for public works. The value of the external commerce was £1,814,793 for imports and £1,662,543 for exports. The import of cotton goods was £254,007; of fish, £151,569; of flour, £145,639; of rice, £104,146. The export of sugar was £150,311; of rum, £104,295; of coffee, £162,219. The tonnage entered and cleared was 1,827,719 tons. The revenue showed an improvement over that of the previous year owing to an increase in the import duties and a tax on cigars and cigarettes, but was less than in 1895 and 1896, while expenditure was considerably greater. The imports showed an increase of 7 per cent. and the exports an increase of 15 per cent. over those of the preceding year. Of the imports less than half came from Great Britain and the rest mainly from the United States, to which 60 per cent. of the exports were shipped, as fruit constitutes now 40 per cent. of the total exports. The sugar also goes to the United States, instead of to England, as formerly, while rum, logwood, coffee, and pimento are sent to England. Cotton goods, boots and shoes, and other articles of cheap quality but good appearance are imported from America in preference to English wares, so that in 1899 the United States for the first time took the lead of Great Britain in the import trade. The revenue for 1901 is estimated at £765,286, and expenditure at £756,991. The estimate of revenue was £144,527 more than the estimate for 1900, chiefly because an estimate of £125,000 for railroad receipts was included. After a long controversy with the railroad company the Government took possession of the railroad on Aug. 15, 1900. A line of steamers has been started to run direct from Jamaica to England in twelve days, each ship to carry at least 20,000 bunches of bananas and the other fruits and products of the island. A subsidy of £40,000 a year will be paid, partly by the Imperial and partly by the colonial Government. The growing of fruit in Jamaica is an industry that has sprung up in the last twenty years, and owes its existence to American enterprise and capital. The fruit exports in 1896 amounted to 4,000,000 bunches of bananas, 10,000,000 cocoanuts, and 100,000,000 oranges. The value of fruit exported in 1898 was over £630,000, of which £620,000 went to the United States.

The *Bahama Islands* have an area of 4,465 square miles, with 53,256 inhabitants in 1898. The Governor is Sir Gilbert T. Carter. There is a Legislative Council of 9 members and a Representative Assembly of 29 members elected by the people with a low property qualification. The number of births in 1898 was 2,164; of deaths, 1,224; excess of births, 940. There were 44 public schools with 5,998 children enrolled and 4,050 in average daily attendance. The sponge fisheries in 1898 yielded £105,038. Shells, pearls, and ambergris are other sea products. Pineapples of the value of £24,360 were exported, including canned fruit. The value of the orange crop was £3,061. Sisal plants covered 20,000 acres. The value of all imports was £238,336 in 1898, of which £53,

430 were for cotton goods and £28,880 for flour. The exports were valued at £174,860. The tonnage entered and cleared was 741,522 tons. The revenue in 1898 amounted to £86,760, of which £63,571 were derived from customs; expenditure, £64,148, of which £7,754 went for public works, £7,935 for the debt, and £5,316 for police. The debt amounted to £118,426.

The *Leeward Islands* comprise Antigua, with Barbuda and Redonda, St. Kitts, with Nevis and Anguilla, Dominica, Montserrat, and the Virgin Isles. They have an aggregate area of 701 square miles. The population at the census of 1891 was 127,723, comprising 5,070 whites, 23,320 colored, and 99,333 blacks. There were 137 schools with 25,122 pupils. Sugar and molasses are grown generally on the islands, except where the sugar cane has been superseded by fruit crops. Antigua produces pineapples as well as sugar; Montserrat, sugar, coffee, cacao, arrowroot, and limes, the juice of which is exported in bottles; St. Kitts and Nevis, sugar and rum; Anguilla, vegetables and salt; the Virgin Islands, sugar and cotton on small farms owned by the negroes themselves, and phosphate of lime from the island of Sombbrero; Dominica, Liberian coffee, cacao, limes, and other fruits. The value of imports in 1898 was £3,943 for the Virgin Islands, £122,968 for St. Kitts and Nevis, £105,103 for Antigua, £19,818 for Montserrat, and £60,260 for Dominica; of exports, £3,855 for the Virgin Islands, £138,222 for St. Kitts and Nevis, £79,178 for Antigua, £13,849 for Montserrat, and £63,912 for Dominica. The imports of cottons into the Leeward Islands were £40,630, and of flour £41,997. The exports of sugar were £175,885 in value; of cacao, £26,360; of lime juice, £25,753. The tonnage entered and cleared in the Virgin Islands was 11,307; in St. Kitts and Nevis, 493,329; in Antigua, 429,168; in Montserrat, 208,430; Dominica, 456,998. The revenue of the Virgin Islands in 1898 was £1,715, and expenditure £1,784; the revenue of St. Kitts and Nevis was £40,430, and expenditure £44,659; the revenue of Antigua was £39,663, and expenditure £55,586; the revenue of Montserrat was £6,199, and expenditure £11,936; the revenue of Dominica was £24,569, and expenditure £24,648. The debt of Montserrat was £17,300; of St. Kitts, Nevis, and Anguilla, £74,450; of Antigua, £137,471; of Dominica, £70,900. Of the revenue of the Virgin Islands £823, and £23,583 in St. Kitts, Nevis, and Anguilla, £21,160 in Antigua, £3,543 in Montserrat, and £11,716 in Dominica came from customs duties on imports.

The *Windward Islands* are Grenada, St. Vincent, the Grenadines, and St. Lucia. The area is 550 square miles, and the population in 1898 was 154,598, of which number 47,976 were in St. Lucia, 237 square miles in extent; 44,000 in St. Vincent, having an area of 147 square miles; and 62,622 in Grenada and the Grenadines, of which the area was 166 square miles. The Governor is Sir Alfred Moloney. In Grenada cacao has supplanted sugar, covering 11,115 acres, and spices are grown on 1,343 acres. St. Vincent, besides sugar and rum, produces spices, cacao, and arrowroot. The products of St. Lucia are sugar, cacao, rum, and logwood. The imports of St. Lucia in 1898 were valued at £271,995, and exports at £93,415; imports of St. Vincent at £95,551, and exports at £44,666; imports of Grenada at £210,783, and exports at £257,274. There were 38 public schools in Grenada in 1899, with 8,386 pupils; 36 schools in St. Vincent; and 39 schools in St. Lucia, with 5,280 pupils. The revenue of St. Lucia for 1898 was £67,268, and expenditure £60,975; the revenue of St. Vincent was £27,361, and expenditure

£27,674; and the revenue of Grenada was £82,879, and expenditure £57,602. Of the expenditure of St. Lucia, £10,686 was on public works, including £4,566 for repairing damages caused by a hurricane, and £13,177 were for the debt; in Grenada £9,600 were spent on public works, and £1,633 in St. Vincent. The tonnage entered and cleared in the foreign trade in 1898 was 1,557,677 tons in St. Lucia, 254,825 in St. Vincent, and 434,198 in Grenada. The value of sugar exported from St. Vincent was £14,610, and of arrowroot £14,518; of cacao from Grenada £227,655, and of spices £22,107; of sugar from St. Lucia £51,509, and of cacao £25,377. The imports of cottons into St. Lucia were £25,150, and of flour £10,444 into St. Lucia and £11,341 into St. Vincent. The public debt of St. Vincent amounted in 1897 to £17,040, that of Grenada to £127,670, and that of St. Lucia to £189,580. Customs duties yielded £32,261 of the revenue of St. Lucia, £32,713 in Grenada, and £13,000 in St. Vincent.

Barbadoes has an area of 166 square miles, with about 190,000 inhabitants in 1896. Bridgetown, the capital, has 21,000. There are 175 Government schools, with 14,734 pupils in average daily attendance. The British garrison consists of 32 officers and 815 men, the island being the headquarters of the European troops in the West Indies. The Governor is Sir James Shaw Hay. There is a House of Assembly of 24 members elected for each yearly session by the people under a restricted franchise which admitted 1,992 voters in 1898. The 9 members of the Legislative Council are appointed. About 100,000 acres, nearly the entire surface of the island, are in cultivation, 30,000 being planted with sugar cane. The yield of sugar has recently increased, amounting in 1898 to 53,575 hogsheads. The export of manjak, or glance pitch, for fuel was 1,160 tons in 1898, valued at £2,320. This is a bituminous substance the value of which is increasing, and which is frequently found, but the veins run irregularly and the broadest and most promising ones sometimes fail suddenly. The fisheries, in which 370 boats are engaged, produce £17,000 annually. The shipping consists of 47 sailing vessels and 2 steamers, of an aggregate tonnage of 7,372 tons. There is a railroad 24 miles long. The total value of imports in 1898 was £1,058,855, of which £133,823 were for cotton goods, £71,020 for fish, £70,622 for rice, and £67,691 for flour. The value of exports was £769,231, of which £150,311 represent sugar and £92,416 molasses. The vessels entered and cleared during 1898 were of an aggregate amount of 1,320,014 tons. The Government collected a revenue of £182,582, of which £97,020 came from customs; and the expenditures were £175,319, the chief item being £23,442 for police. The debt amounted to £414,000. In 1899 the revenue amounted to £216,022, including the hurricane loan from the Imperial Government. The expenditure was £207,883, including £30,000 for repairs necessitated by the hurricane of 1898, mostly for rebuilding the huts of the laboring population. The exports in 1899 amounted to £845,590, the chief exports being 43,907 tons of muscovado sugar, worth £439,070; 2,312 tons of dry sugar, worth £34,680; and molasses of the value of £109,252. Most of the exports go to the United States. The imports were valued at £998,006. The imports of rice and fish show a decline, indicative of poverty and distress among the poorer people of this overcrowded island. The Government helps poor whites to emigrate to the United States and Canada. The sugar planters and the people employed on the plantations look to the Government to aid them in introducing new machinery and modern

processes by which they can extract more juice from the cane and a better quality of sugar than they can sell profitably in Canada or perhaps in England, as they expect to lose the market that they now have in the United States.

The area of *Trinidad* is 1,754 square miles, with a population estimated in 1898 at 260,000. Port of Spain, the capital, had 34,037 inhabitants. The number of marriages in 1898 was 1,100; of births, 7,962; of deaths, 6,755; excess of births, 1,207. In 204 schools, which receive a Government grant of £35,924, there were 24,866 pupils in 1898. Of the total area of the island, which is 1,120,000 acres, 442,924 acres are cultivated, 57,000 acres being planted with sugar cane, 103,000 acres with cacao, 1,500 acres with coffee, 18,500 acres with ground provisions, and 14,000 with cocoanuts. The Governor is Sir H. E. H. Jerningham, who is assisted by a Legislative Council of 9 official and 11 nominated members. The pitch lake in the center of Trinidad is Crown property leased to an English company, which exported 100,208 tons of asphaltum in 1898. There is a railroad 31 miles long. The length of telegraphs is 690 miles. The value of imports in 1898 was £2,283,056, and of exports £2,310,133. The importation of flour was £152,797; of textile goods, £315,632; of rice, £35,772. The sugar exports amounted to £603,285; cacao, £812,270; molasses, £16,593. The vessels entered and cleared had a total tonnage of 1,163,722 tons.

The island of *Tobago* was annexed to Trinidad in 1889, and in 1899 was made a ward of Trinidad. The area is 114 square miles, with 21,000 inhabitants, who cultivate cotton, tobacco, and cacao, as well as sugar. The revenue collected in 1898 was £8,213; expenditure, £7,479. The value of imports was £10,855, and of exports £21,443; shipping entered and cleared 25,751 tons.

British Guiana has an area of 109,000 square miles and a population computed in 1898 at 286,222, more than a third of whom are Africans, and a still greater proportion East Indians. The number of births in 1898 was 8,500, and of deaths 9,706. Georgetown, the capital, has 53,176 inhabitants. The number of coolie immigrants in 1899 was 2,193; the number returned to India, 1,238. There are 208 aided schools, with 28,689 pupils. The Governor is Sir Walter J. Sendall. The Court of Policy consists of 7 official members and 8 elected by the qualified voters, 2,815 in 1899. The revenue in 1899 was £525,865, of which £304,366 came from customs, £85,548 from licenses, £34,292 from the duty on rum, and £21,209 from the royalty on gold. The expenditure was £525,387, of which £157,690 was for the civil establishment, £22,593 for ecclesiastical affairs, £29,754 for the judiciary, £27,653 for education, and £21,106 for public works. The public debt was £975,791. Of 79,278 acres under cultivation sugar occupies 69,814 acres, divided between 74 estates. The value of sugar exports in 1899 was £1,040,982; of molasses, £11,968; of rum, £144,712; of balata, £28,153; of gold, £415,746. Mining began in 1886, and in ten years the value of gold produced was £2,796,300. In 1897 the yield was 126,702 ounces; in 1898, 125,080 ounces; in 1899, 112,464 ounces. The total value of imports in 1899 was £1,371,412, and of exports £1,775,691. The imports of flour were £139,088 in value; of tissues, £192,570; of rice, £105,631; of machinery, £48,963; of fertilizers, £70,412; of fish, £57,274; of coal, £37,156; of hardware, £82,711. There are 40 miles of railroad, 559 miles of Government telegraphs and cables, and 677 miles of telephone lines. The number of vessels belonging in the colony in 1898

was 48, of which 33, of 1,682 tons, were sailing vessels, and 15, of 1,171 tons, steamers. More than half the imports come from Great Britain, and a quarter from the United States, and the exports go mainly to those two countries, the United States taking the larger share. The export of gold was less in 1899 than in previous years, owing to the exhaustion of the richer deposits that were being worked. New ones have not been discovered, but investigations point to a wider extent of auriferous lands than was believed to exist. Cacao, rice, kola, and tobacco are products that have lately been introduced to take the place of the sugar cane. The Government encourages the settlement of small homesteads. Of the total area of the colony only a fringe on the coast and on the river banks is cultivated. The forests of the interior contain beautiful cabinet woods, and rubber and other valuable gums.

French Colonies.—The French island of *Guadeloupe* has an area of 583 square miles itself, and the dependent islands of *Marie Galante*, *Les Saintes*, *Désirade*, *St. Barthélemy*, and *St. Martin* being added, the total area of the colony is 688 square miles. *Guadeloupe* had 170,195 inhabitants in 1897. The population of the dependencies is 23,605. The Governor is D. Moracchini, residing at *Basse Terre*. The revenue in 1900 was estimated at 4,968,324 francs, and expenditures at the same, France giving 1,632,950 francs to cover the deficiency of local revenue. The value of imports in 1899 was 18,451,000 francs, and of exports 18,251,000 francs. The post office in 1896 handled 586,880 internal and 606,468 international letters, etc. There are about 15,000 Indian coolies on the island. The rest of the population, except the white planters, is African. The economical situation is worse than in *Martinique*, and the negro population for want of employment has become impoverished.

The area of *Martinique* is 381 square miles. The population in 1894 was 187,692. The expenditures in 1900 were calculated at 5,729,793 francs. The French Government bears about 35 per cent. of the total expenditure. The Governor is G. Gabrié, residing at *Fort-de-France*. The value of imports in 1898 was 27,005,000 francs, and of exports 26,603,000 francs. Of the imports, 14,182,000 francs came from France. The postal traffic in 1894 was 695,064 internal and 893,595 foreign letters and other mail matter. A battalion of marine infantry and 2 batteries of artillery are kept in *Martinique*, and there is a company of colonial gendarmery on each of the islands. The Government is constantly in financial difficulties. The feud between blacks and whites causes difficulties in addition to those that arise from the depression of the sugar industry. The creoles are few and, hampered by want of capital, are unable to devise new occupations for the laborers whom they can no longer profitably employ on their sugar plantations. Excepting the planters and some thousands of coolies, the whole population is black or colored, descendants of African slaves. About half the imports come from France, which receives practically the whole of the exports from both islands.

French Guiana is administered by a Governor, L. Mouttet, assisted by a Council General of 16 members. The population is 30,310, including 3,900 convicts and 1,800 convict settlers. There are 1,500 Indians. The area is estimated at 30,260 square miles. The revenue in 1900 was estimated at 2,380,940 francs, including a contribution from the French Government, which expended 6,899,061 francs on the colony in 1900, but of this 5,450,550 francs were for the penal establishment. *Guiana*

was made a penal settlement in 1885, and since then habitual criminals and all who are sentenced for more than eight years are sent there. The labor of the convicts is now employed for general purposes with good results. Crops are rice, corn, manioc, cacao, coffee, sugar, indigo, and tobacco, though the area cultivated is small. Rum, cacao, coffee, phosphates, and cabinet woods are exported. The exports of gold were 74,646 ounces in 1897, 48,000 ounces in 1898, and 81,715 ounces in 1899. Gold is found mainly in alluvial deposits, though quartz veins are also worked. The import trade has fallen off greatly, but the exports tend to increase. The interior is covered with dense forests, and the country is exceedingly unhealthy and thinly populated. More than a third of the population live in the town of *Cayenne*. Silver and iron mines are worked besides the deposits of gold and phosphates. The gold fields in the south that were claimed by France have been awarded to Brazil under the arbitration convention of April, 1897, but they have been developed by miners from French *Guiana*.

Dutch Colonies.—The island of *Curaçao*, with the dependencies of *Aruba*, *Bonaire*, *St. Eustache*, *Saba*, and the Dutch part of *St. Martin*, has an area of 403 square miles, that of *Curaçao* by itself being 210 square miles. The population in 1898 was 51,524. The number of marriages in 1898 was 203; of births, 1,583; of deaths, 942; excess of births, 641. The Governor is C. A. H. Barge, residing at *Willemstad*. The revenue in 1898 was 517,485 guilders; expenditure, 687,529 guilders, leaving a deficit of 170,044 guilders. The number of vessels that visited the island in 1898 was 1,074, of 1,266,000 cubic metres. The post office forwarded 36,272 internal and 489,080 external letters; receipts, 73,000 francs; expenses, 58,000 francs. The value of imports in 1898 was 1,960,000 guilders.

Danish Colonies.—Denmark has the islands of *Santa Cruz*, *St. Thomas*, and *St. John*, which combined have an area of 138 square miles. Their population at the census of 1890 was 114,229, of whom 53,429 were males and 60,800 females. The imports in 1898 were valued at 3,103,000 kroner, and exports at 3,050,000 kroner. The Governor is Col. C. E. von Hedemann. The indebtedness of the colonies to the mother country amounts to 12,000,000 kroner. It has been proposed that the United States discharge this debt and assume the sovereignty of the islands if the Danish Government be willing to make the transfer. The islands have long been a financial burden to the home Government, and their trade with Denmark is constantly decreasing.

WEST VIRGINIA, a Southern State, admitted to the Union June 19, 1863; area, 24,780 square miles. The population, according to each decennial census since admission, was 442,014 in 1870; 618,457 in 1880; 762,794 in 1890; and 958,800 in 1900. Capital, *Charleston*.

Government.—The following were the State officers in 1900: Governor, George W. Atkinson; Secretary of State, William M. O. Dawson; Treasurer, M. A. Kendall; Auditor, L. M. LaFollette; Attorney-General, Edgar P. Rucker; Superintendent of Schools, J. R. Trotter; Adjutant General, J. W. M. Appleton; Librarian, P. S. Shirkey; Bank Examiner, O. B. Wetzel, succeeded in May by C. B. Kefauver; Secretary of the Board of Agriculture, J. B. Garvin; Commissioner of Labor, I. V. Barton; Mine Inspector, J. W. Paul; Fish and Game Warden, Frank Lively—all Republicans; Presiding Judge of the Supreme Court of Appeals, Marmaduke H. Dent; Associate Judges, John W. English, Henry Brannon, and H. C. Mc-

Whorter; Clerk, J. A. Holley—all Democrats except Judge McWhorter, who is a Republican.

State officers are elected for terms of four years at the time of the presidential elections, and are inaugurated on the 4th of the following March. The Legislature meets biennially in January of the odd-numbered years.

Population.—The increase of population in the past decade was 25.6 per cent., while from 1880 to 1890 it was 23.3 per cent. The census of 1900 by counties is as follows: Barbour, 14,198; Berkeley, 19,469; Boone, 8,194; Braxton, 18,904; Brooke, 7,219; Cabell, 29,252; Calhoun, 10,266; Clay, 8,248; Doddridge, 13,689; Fayette, 31,967; Gilmer, 11,762; Grant, 7,275; Greenbrier, 20,683; Hampshire, 11,806; Hancock, 6,693; Hardy, 8,449; Harrison, 27,690; Jackson, 22,987; Jefferson, 15,935; Kanawha, 54,696; Lewis, 16,930; Lincoln, 15,434; Logan, 6,955; Marion, 32,430; Marshall, 26,444; Mason, 24,142; Mercer, 23,903; Mineral, 12,883; Mingo, 11,359; Monongalia, 19,944; Monroe, 13,130; Morgan, 7,294; McDowell, 18,747; Nicholas, 1,403; Ohio, 48,024; Pendleton, 9,167; Pleasants, 9,345; Pocahontas, 8,572; Preston, 22,727; Putnam, 17,330; Raleigh, 12,436; Randolph, 17,670; Ritchie, 18,091; Roane, 19,852; Summers, 16,265; Taylor, 14,970; Tucker, 13,433; Tyler, 18,252; Upshur, 14,696; Wayne, 23,619; Webster, 8,852; Wetzel, 22,880; Wirt, 10,284; Wood, 34,452; Wyoming, 8,380.

The population of Wheeling is 38,878, an increase of 12.62 per cent. Other incorporated places having more than 2,000 are: Huntington, 11,923; Parkersburg, 11,703; Charleston, 11,099; Benwood, 4,511; Bluefield, 4,644; Charlestown, 2,392; Clarksburg, 4,050; Davis, 2,391; Elkins, 2,016; Fairmont, 5,655; Grafton, 5,650; Hinton, 3,763; Keyser, 2,536; Martinsburg, 7,564; Moundsville, 5,462; New Cumberland, 2,198; Piedmont, 2,115; Sistersville, 2,979; Thomas, 2,126; Wellsburg, 2,588; Weston, 2,540.

Finances.—The official statement of the financial transactions of the State by the Treasurer for the fiscal year ending Sept. 30, 1900, is as follows: Balance in treasury Oct. 1, 1899, to the credit of State fund, \$228,819.96; general school fund, \$387,460.71; the school fund (uninvested), \$518,468.55; balance in treasury, \$1,134,749.22; balance in treasury Oct. 1, 1900, \$119,211.93; total receipts, \$1,806,015.54; total receipts plus balance, \$2,925,227.47; disbursements, \$1,790,478.25; balance, \$1,134,749.22. The school fund (irreducible)—amount invested, \$522,500; balance uninvested, \$518,468.55; grand total, \$1,040,968.55; net increase for the year, \$67,656.16.

The Treasurer says: "The unprecedented appropriations made by the last Legislature gave rise to a well-grounded fear that the treasury would be drained before the next meeting of the Legislature, and that we would be compelled to borrow money. But owing to the fact that collections have been remarkably good and considerable revenue has been received from sources heretofore unproductive, we have been able to maintain a substantial balance in the State fund."

It is explained that the uninvested part of the school fund is not lying idle, but is lent at 3 per cent., payable quarterly. This fund is increasing at the rate of more than \$50,000 a year. In the past four years foreign corporations chartered in the State have paid into the treasury \$494,652.29. Criminal charges for the same period cost the State \$380,000.

Education.—For the four years ending Sept. 30 the State paid for school purposes \$1,555,672.24. The school fund receives all money coming to the State "from forfeited, delinquent, waste, and un-

appropriated lands; and from lands heretofore sold for taxes and purchased by the State of Virginia, if hereafter redeemed or sold to others than this State; all grants, devises, or bequests that may be made to this State for the purposes of education or where the purposes of such grants, devises, or bequests are not specified; this State's just share of the literary fund of Virginia, whether paid or otherwise liquidated; and any sums of money, stocks, or property which this State shall have the right to claim from the State of Virginia for educational purposes; the proceeds of the estates of persons who may die without leaving a will or heir, and of all escheated lands; the proceeds of any taxes that may be levied on revenues of any corporations; all moneys that may be paid as an equivalent for exemption from military duty; such sums as may from time to time be appropriated by the Legislature for the purpose; and all interest from the fund not used for schools is added to the capital."

There is a compulsory school law imposing a fine of \$2 for every day a child is kept from school without a valid excuse, but it seems not to be enforced.

The building of the preparatory branch of the State University at Montgomery has been enlarged, so as to accommodate all the present students. The first student entered the university this year from this school, which has been in operation about four years; the explanation is that as there was no preparatory school in the neighborhood of Montgomery, it was necessary to begin with the very lowest English branches. The State has normal schools at Athens and Huntington.

The State University, at Morgantown, reported this year a larger number of students than ever. About 50 were graduated in June; the law class was unusually small, but the academic classes were large. The legislative appropriation for the past two years was \$196,000. Trouble has arisen among the faculty from the dismissal of two professors, and one of them has entered suit against the president, whom he holds to be responsible.

Militia.—The number of men in the organized militia of the State is given in the Adjutant General's report as 1,093, and the number unorganized, but available for military duty, as 125,000.

Corrections.—At the Girls' Industrial School, at Salem, 39 inmates were present in March. A site across the ravine from the building has been bought, to make a home for colored girls needing the restraint of the institution. Besides industrial training, the girls have school instruction four hours a day.

The daily average of convicts at the Penitentiary for the past three and a half years was 619; the daily cost for maintenance for each, \$0.262; the improvements made from earnings amounted to \$17,944.

Banks.—There were 89 State banks in operation between April 1 and Sept. 30, an increase of 11 since the last report of the Bank Examiner. Certificates of incorporation have been issued to 4 additional banking institutions which had been organized or were in process of organization. The total resources of the State banks for the last two years were as follow: \$21,747,645.58 for 1899 and \$27,430,644.07 for 1900; capital stock (1899), \$3,251,257.10 and (1900) \$3,449,676.40. The increase for the year was \$33,077,953.01 in total aggregate deposits. Surplus funds and undivided profits amounted to \$1,672,328.36, and \$1,410,965.64 for the year 1899. The increase in savings deposits amounted to \$470,640.10, or nearly 48 per cent.

The Montgomery Banking and Trust Company

went into the hands of a receiver, a shortage having been found of about \$25,000, and the cashier was arrested in October.

Railroads.—The statistics of railroad construction credit the State with 225 miles of new track on 10 lines in 1890 and 1900. Contract has been made for the construction of a road along Coal river—the Kanawha, Pocahontas and Coal River Railroad—and part of the work has been done. It will give an outlet for great quantities of coal and timber.

Industries and Products.—The Labor Commissioner's report shows the following figures on the manufactures of the State: Five hundred establishments report 28,334 employees on the pay rolls Jan. 1, 1897; 34,889 employees on the pay rolls Jan. 1, 1899; 40,221 employees on the pay rolls Jan. 1, 1900; an increase of 48 per cent. Average number of weeks in operation year ending Jan. 1, 1900, 46½.

Three hundred and five establishments report an advance in wages rates, affecting 22,553 employees. Three establishments reduced wages, affecting 24 employees.

It is also shown that 298 establishments—mercantile, mining, and manufacturing—started between March, 1897, and January, 1900, report 10,188 employees, \$345,816 paid monthly in wages, and \$22,842,547 capital invested.

The State stands third in regard to coal production, being surpassed only by Pennsylvania and Illinois. The output in 1900 was 22,000,000 tons. In 1890 the State stood fourth, with 7,394,654 tons. The number of men employed at the mines this year was 28,017. Of the quality of the coal, the London Statist said: "Both for 'bunker' purposes and for export it is probable that the coal of West Virginia is destined to take the lead. This State has a far larger coal area than the United Kingdom has, and the seams are so placed that practically all the mining is done by the simple, easy, and economical method of working by adits. It is this State that produces the famous 'Pocahontas' coal, which has been declared by some analysts to be fully equal to the very best coal produced in South Wales—that is to say, to the best in the world. About 5,000,000 tons per annum of this valuable coal are now being turned out, and the most of it finds its way to Norfolk and Newport News for shipment."

The State is second in coke production and first in oil.

From the report of the Board of Agriculture it appears that the season of 1899 was not favorable, and the yield of some crops was below the average, yet the corn crop was estimated at 18,043,584 bushels; wheat, 3,880,751 bushels; oats, 3,158,442 bushels; rye, 132,290 bushels; and buckwheat, 238,255 bushels. Total value, \$16,695,847. Potatoes, 2,672,784 bushels, valued at \$1,398,848; hay, 6,083,031 tons, valued at \$6,083,031.

Lawlessness.—A negro was lynched near Tazewell. April 19, for assault on a young girl. A great excitement was caused at Fayetteville. Dec. 28, among the negroes by the arrival of 25 negroes, arrested at Star for having attempted to lynch Squire Workman at that place on Christmas night. Squire Workman had arrested a negro on Christmas Day for disorderly conduct. Later some negroes tried to rescue the prisoner, and one of them was killed. Then followed the attempt that night to lynch the justice, for which the prisoners were arrested.

Political.—This was the year for electing State officers for the ensuing four years beginning March 4, 1901. There were four tickets—Republican, Democratic, People's party, and Prohibitionist.

The first Republican convention was held at Fairmont, May 8, and delegates were chosen to the national convention. The second convention, for nominating State officers, met in Charleston, July 11. The platform approved the presidential nominations, commended the course of the State's representatives in Congress, denounced disfranchisement of colored voters, opposed the removal of any of the State buildings, and said, concerning apportionment: "In the apportionment for election of members of the Legislature we favor giving to every county at least one delegate, and the abandonment, so far as possible, of the legislative districts, which, while being a plan intended to equalize representation, has been perverted by the Democrats into a partisan scheme to disfranchise counties and voters."

And in regard to Democratic State administration: "We condemn the Democratic party for twenty years of incompetence and bungling, coupled with fraud and embezzlement, in the management of the affairs of the State. We call upon the leaders of that party to explain why it was that commissioners of school lands and delinquent sheriffs were allowed to pocket the people's money and were never called to account; why it was that tons and tons of worthless documents were annually ground through the press at enormous cost to the State, only to lie and rot in the vaults and cellars of the Statehouse; why it was that hundreds of foreign corporations were allowed to do business in this State by paying only one fifth of the amount of license taxes required by law; why it was that the irreducible school fund, which during the last four years has increased at the rate of \$50,000 per annum, only increased \$20,000 per annum when they were in control; why it was that they could not construct a State building without laying a special levy, and making supplemental assessments, and then borrowing money, while the present administration, out of the ordinary revenues, has provided for more public buildings than have ever been constructed in the same length of time in the history of the State, and has not borrowed a cent nor increased taxes; why it was that the Democratic Legislature of 1893 paid \$18,000 out of the State treasury for alleged services in collecting an obligation due this State from the United States Government, which services were absolutely unnecessary, as the United States Government cheerfully paid the full amount of the obligation to the State treasury; why it was that the last Democratic Governor of this State borrowed \$100,000 out of the irreducible school fund for State purposes, paying 6 per cent. interest for it, while at the same time one of his State officers had thousands of dollars of the State's money in his pocket and was paying neither principal nor interest; why it was that the cost of the public printing, binding, and stationery from 1890 to 1896 inclusive, under Democratic control, amounted to a yearly average of nearly \$46,000, while under the present administration it has averaged less than half that amount; and why it was that, with the same resources at their command which the Republicans now control, they were never able to place more than \$1,400,000 at the disposal of the Legislature in any two years, while, with no increased taxation and without borrowing one cent, the present administration in the same period of time has furnished over \$3,000,000."

The eight-hour law was approved, and the rapid development of the industries of the State under Republican administration pointed out. Further, the platform declared: "We are unalterably opposed to the payment of any part of the Virginia debt. That portion of Virginia which now consti-

tutes the State of West Virginia paid its full share of taxes into the treasury of Virginia for almost three quarters of a century, and received but an insignificant share of the public improvements for which the Virginia debt was created; and when West Virginia was admitted into the sisterhood of States, the assets which belonged to both of the States were nearly all kept by the mother commonwealth; and yet it was arbitrarily decided by the Legislature of Virginia that West Virginia should pay one third of the indebtedness of



ALBERT B. WHITE,
GOVERNOR OF WEST VIRGINIA.

Virginia, without any reference to the amount of the expenditure of public moneys for public improvements within what is now the territory of West Virginia, and without giving to West Virginia credit for the amount of taxes paid by her people into the treasury of Virginia. West Virginia has issued no bonds and owes no debt."

The following candidates were named: For Governor, Albert B. White; Auditor, Arnold C. Scherr; Treasurer, Peter Silman; State Superintendent of Free Schools, Thomas C. Miller; Attorney-General, Romeo H. Freer; Judges of the Supreme Court, Henry Brannon and George Poffenbarger.

The Democratic convention met at Parkersburg, June 6. A platform was adopted pledging support to the Kansas City ticket and platform. It denounced trusts, imperialism, the Porto Rican tariff, the Philippine war, militarism, the recent financial act of Congress, the increases of the standing army, and the administration of President McKinley and of Gov. Atkinson. Sympathy was expressed for the Boers. The Nicaragua Canal was strongly favored. A resolution was adopted against recognizing the old Virginia debt in any form.

In an address before the convention ex-Gov. McCorkle arraigned the Republican party in a way that met the approval of the delegates and is interesting for comparison with the extracts given above. He denounced the action of the Secretary of State and the Republican party in defrauding the Democrats of a majority in the Legislature of last year, and denounced the Republican party in this State for its delinquency in allowing the State to be sued on the Virginia debt. He criticised Gov. Atkinson for claiming that the institutions of the State were efficiently managed, and demanded why the present superintendent, who is criticised for his actions all over the State, was allowed to continue in office. He denounced the extravagant and inefficient management of the university; showed that it cost at least four times as much under the present administration and with no more students than with the Democratic administration. He took up the institutions of the State and showed by the appropriations that they had immensely increased in expenditure under the Republican administration; dwelt upon the public printing, binding, and

stationery, and showed its immense increase under Republican management. He showed further that during his administration he had increased the value of railroads \$4,000,000, while, notwithstanding the increase of mileage, the value has been decreased by the Republican administration. He showed that the highest appropriation under the Democratic administration was \$1,300,000, but that under Republican management it had increased to \$2,200,000, the highest ever known in the history of the State. He then took up the question of the material improvement of the State, and showed that the Democratic party had practically made the State what it is, and showed what it had done in the way of creating the school department, building the university and the public institutions of the State, and showed the marvelous progress under Democratic management.

Following is the ticket: For Governor, John H. Holt; Auditor, James H. Miller; Treasurer, J. Garland Hurst; State Superintendent of Free Schools, Robert A. Armstrong; Attorney-General, George M. McCoy; Judges of the Supreme Court, John W. English, William G. Bennett.

The People's party, in convention at Parkersburg, July 5, made the following nominations: For Governor, H. T. Houston; Auditor, W. C. Raleigh; Treasurer, John Beury; Superintendent of Schools, F. E. Ashburn; Judge of the Supreme Court, J. W. Davis. The last named declined.

The executive committee of the Prohibition party named the ticket which follows: For Governor, T. R. Carskadon; Auditor, J. B. McGregor; Treasurer, W. C. B. Moore; Superintendent of Schools, E. E. Mercer; Attorney-General, C. D. Merriek.

The Republican candidates were elected, the vote standing: White, 118,807; Holt, 100,226; Carskadon, 1,373; Houston, 266. The Legislature has 17 Republicans in the Senate and 32 in the House, and 9 Democrats in the Senate and 39 in the House; 9 seats are contested.

The presidential vote was as follows: McKinley, 119,851; Bryan, 98,791; Woolley, 1,585; Debs, 286; Barker, 274.

WISCONSIN, a Western State, admitted to the Union May 29, 1848; area, 56,040 square miles. The population, according to each decennial census since admission, was 305,391 in 1850; 775,881 in 1860; 1,054,670 in 1870; 1,315,497 in 1880; 1,688,880 in 1890; and 2,069,042 in 1900. Capital, Madison.

Government.—The following were the State officers in 1900: Governor, Edward Scofield; Lieutenant Governor, Jesse Stone; Secretary of State, William H. Froehlich; Treasurer, James O. Davidson; Attorney-General, Emmett R. Hicks; Superintendent of Education, L. D. Harvey; Railroad Commissioner, Graham L. Rice; Insurance Commissioner, Emil Giljohann; Adjutant General, C. R. Boardman; Dairy and Food Commissioner, H. C. Adams; Labor Commissioner, Halford Erickson; Bank Examiner, E. I. Kidd; Health Commissioner, F. M. Schultz; Fish and Game Warden, J. T. Ellarson; Tax Commissioners, Norman S. Gilson, George Curtis, W. J. Anderson; Forest Warden, C. E. Morley; Chief Justice of the Supreme Court, J. B. Cassoday; Associate Justices, John B. Winslow and Joshua E. Dodge (Democrats), Charles V. Bardeen and Roujet D. Marshall; Clerk, Clarence Kellogg. With the exceptions mentioned, all are Republicans.

State officers are elected for terms of two years in November of the even-numbered years. The Legislature meets biennially in January of the odd-numbered years. It consists of 33 Senators and 100 Representatives. Digitized by Google

Population.—In 1880 the State stood sixteenth in population, and fourteenth in 1890; by this census it is thirteenth. The percentage of increase is 22.6. There are 1,657 Indians not taxed. Statistics of some of the counties are not at hand, but the following data are given: There was an increase in the population of every one of the counties. Milwaukee led with an increase since 1890 of nearly 94,000, the present population of the county being 330,000. Other counties reporting an increase of more than 10,000 are Douglas, 29,000; Marathon, 13,000; Marinette, 10,500. Racine, including the city, gained over 9,000. Dane County gained nearly 10,000, the present population of the county being 69,500. Ashland gained 113 only; Green County exactly the same. But as a rule northern counties gained the most markedly: Wood, 8,000 to her present population of 26,000; Shawano, 8,240 to 27,500; Chippewa, 8,000 to 33,000; Clark County, 8,140 to 26,000.

The gains are large in the cities, some farming towns showing a large percentage of decrease. Milwaukee has grown from 204,186 in 1890 to 285,315 in 1900; Superior City, from 11,983 to 31,091; Racine, from 21,014 to 29,102; La Crosse, from 25,090 to 28,895; Oshkosh, from 22,836 to 28,284. Sheboygan has 22,962; Madison, 19,164; Eau Claire, 17,517. The capital city (Madison) had 13,426 in 1890.

Finances.—In urging reform in the financial management of the State, Gov. La Follette says in his message to the Legislature: "Under the law the fiscal year of the State ends Sept. 30, and all regular official reports are for the term ending on that day. This fact, with a few others closely related to it, I believe to be responsible for much of the public misunderstanding of State finances and for most of the misleading information concerning State affairs upon which legislators have been obliged to rely for guidance. Reports for the fiscal year show balances upon a date within a few weeks after the receipt of large amounts of revenue as license fees from corporations, etc., but months before the close of the administration term—months in which extraordinary disbursements, including legislative expenses in each biennial term, must be made before considerable revenues are again received. The usual and natural result of this system is found in misleading official reports, showing a handsome cash balance at the close of the fiscal year, and four months later a new administration finds itself confronted at the beginning of its term with an alarming deficit as the foundation for new appropriations by the Legislature and the natural and steady growth in ordinary current expenses. At the close of the fiscal year, Sept. 30, 1900, the balance in the general fund of the State was \$496,408.74. At the end of the calendar year and administration term, Jan. 7, 1901, the general fund balance was only \$151,833.77. Of this last balance, \$50,000 is derived from advance payment of railway license fees which do not become due until March. The State aid to free high schools, amounting to \$97,607.83, due Dec. 1, 1900, is unpaid—although the warrants therefor are in the Treasury Department—because available moneys in the general fund are required to meet current expenses. These items, when properly deducted, leave a net balance of \$4,125.94 in the general fund. Legislative and other expenses payable within the next few days will aggregate more than \$100,000, and there is no appreciable amount of receipts due to the general fund from any source before the time for payment of corporation license fees and State taxes, which was changed from February to March by the last Legislature. Besides this inevitable deficit, there

is an additional deficiency of \$323,505.74, being the amount of appropriations by the last Legislature the payment of which has been refused on account of lack of means in the general fund, and which continues as a charge to be paid out of that fund as soon as sufficient moneys 'not otherwise appropriated' shall accumulate therein. In brief, you have a legacy of over \$300,000 excess appropriations from the last Legislature to take into your considerations, and the administration begins business with a considerable treasury deficit in sight, in lieu of the balance which might be expected from the condition of the general fund at the close of the fiscal year as shown by the annual official reports available to the public for purposes of information."

A table is given showing receipts and disbursements for the ten years ending in 1898, from which it is seen that in four of the ten years there was an excess of disbursements over receipts even at the close of the fiscal year; and there was a steady increase in the cost of State government from \$4,894,871 in the first biennial term to \$7,346,947 in the last.

The valuation of property in the State was somewhat higher than in 1899, and the tax levied was \$1,345,570. A 1-mill tax is levied for schools. The university receives \$268,000, the normal schools \$190,000, and the free high schools \$100,000. Interest on certificates of indebtedness takes \$157,570. The cost of State printing for the past biennium was \$118,111.77.

Education.—Following are school statistics of 1900: School population, 731,063; enrollment in public schools, 445,141; teachers, 13,063; graduates of normal schools teaching under county superintendents, 745; number that have attended normal schools, not graduated, 1,399; holding State certificates, 533; average monthly wages of women teaching, \$31.79; of men, \$43.84; average wages of women teaching in cities, \$45.43; of men, \$102.03; expense for each pupil in the country, \$10.81; in cities, \$18.00; expense for teachers' wages per pupil, in country \$7.08, in cities \$11.86; total expenditure for teachers' wages, \$760,211.02; for buildings and repairs, \$585,247.44; for apparatus, furniture, etc., \$119,997.73; number free high schools, 219; number pupils enrolled in free high schools, 17,392; teachers in free high schools, women 339, men 325; pupils in day schools for the deaf, 198.

The receipts for common schools, including free high schools, were \$7,209,578.45; the disbursements, \$5,735,724.45; the receipts for normal schools were \$358,132.23; the disbursements, \$284,759.73. The receipts for the university for the year—including a balance, Sept. 30, 1899, of \$23,808.44—were \$698,944.13; the disbursements, \$592,797.46. For day schools for the deaf the State paid \$23,930.89; for teachers' institutes, \$11,298.55; and for salaries and allowances to county superintendents, \$71,475. The total amount expended was \$6,721,876.08.

The number of diplomas and certificates issued and countersigned by the State superintendent in the school year was 1,048, of which 917 were of normal schools. The number of teachers in rural schools receiving less than \$25 a month was 2,938; those receiving \$25 to \$35 was 4,286; and more than \$35, was 1,693.

The registration at the normal schools has not increased in the past two years. At the university nearly 1,600 were enrolled before the end of September. In March 87 were graduated from the Agricultural College; the total attendance in this department of the university was 252. The dairy school had 113 students in November.



LIBRARY OF THE WISCONSIN HISTORICAL SOCIETY, MADISON.

The number of private schools outside of cities is given as 448, their teachers 645, and pupils 27,213. In cities, 13,301 attended 213 private schools twelve weeks or more, under 825 teachers.

The number of colleges, academies, and seminaries reported, not including those under State or public control, was 19; they paid for instruction \$101,658.

The finest building owned by the State was dedicated in October. This is the Historical Library building on the university campus, Madison. It is of white sandstone, and has cost \$600,000. It was dedicated by the State Historical Society, for whose use it was built. The dedicatory address was made by Charles Francis Adams. The forty-eighth annual meeting of the society was held in the new building in December. The books in the library include 215,606 titles. The sessions of the summer school for library training, supported by the State Free Library Commission, were held this year in the new building.

Charities and Corrections.—The number of inmates in the charitable and penal institutions Oct. 1 was 2,784, and of officers and employees 632, divided as follows:

INSTITUTIONS.	Inmates.	Officers and employees.
State Hospital for Insane.....	424	122
Northern Hospital for Insane.....	585	169
School for the Deaf.....	190	46
School for the Blind.....	105	44
Industrial School for Boys.....	328	54
State Prison.....	496	47
State public school.....	147	45
Home for Feeble-minded.....	394	84
State Reformatory.....	115	21

The current expenses of the 9 institutions for the two years ended Sept. 30, 1900, were \$1,272,379.20, divided as follows: State Hospital for Insane, Mendota, \$218,787.43; Northern Hospital for Insane, Oshkosh, \$260,618.50; School for Deaf, Delavan, \$82,969.80; School for Blind, Janesville, \$71,541.35; Industrial School for Boys, Waukesha, \$136,075.57; State Prison, Waupun, \$164,435.59; State Public School, Sparta, \$84,393.64; Home for Feeble-minded, Chippewa Falls, \$141,576.24; State Reformatory, Green Bay, \$91,981.08.

A new and uniform system of bookkeeping went into effect in all the State institutions Oct. 1.

All expenditures must be audited by the Secretary of State, and all income reported to him.

Militia.—The number of organized militiamen in the State was given in July as 2,745, and the number of men available for military duty but unorganized as 274,116. The expenses of the Adjutant General's department, including the pay of the militia while they were in camp, rents of armories, and salaries, was \$91,093 in 1899 and \$88,512.32 in 1900. Troops were paid \$45,598.71 in 1899 and \$43,638.74 in 1900. In the Pension Department 976 cases were settled, in 404 of which the claims were allowed.

Medical Registration.—The receipts of the State Board of Medical Examiners for the two years from licenses, registrations, and examinations were \$8,772.52, while the expenses were \$7,900.20, a balance of \$863.31 being deposited in the State treasury. The board granted 1,220 licenses at \$5 each, and there were 1,260 registrations at \$2 each.

Railroads.—In the first eighteen months of the operation of the law prohibiting State officials from riding on passes, the expense to the State for transportation of State officials and members of State boards was \$26,632.66. In statistics of railway construction the State is credited with only 86 miles of new track, laid on 8 lines, in the years 1899-1900.

Insurance.—The receipts of the Insurance Department for 1900 were \$431,318.87, an increase of nearly \$50,000 over 1899, and of nearly \$200,000 over 1898, before the new insurance law went into effect, the receipts for 1898 being \$239,774.43. All of this money is turned into the State treasury. The Northwestern Life Company alone paid \$241,636.16. The expenses of the department for the year were about \$13,000, not including payments for publication of statements of the insurance companies, which under the law are charged as expenses of the department, but are paid direct by the companies.

The State is carrying insurance on its buildings to the amount of \$2,600,000, at an annual cost of \$8,064.

Industries and Products.—The latest labor reports available are for 1897-'98. In those years 528 orders were issued requiring guards or protection around dangerous machinery, the erection

of 26 fire escapes was ordered, the repair of 76 unsafe elevators, the guarding or repair of 32 defective or dangerous stairways or other openings, the changing of 16 doors so as to swing outward, the dismissal of 389 children illegally employed. For the same two years the number of establishments inspected was 2,463, with 119,026 male employees and 14,711 female employees. Some of the returns under the "special investigation" into child labor are significant; 215 establishments were visited, employing 33,805 workers, of whom practically 10 per cent. were under sixteen years of age, and of these 4.6 per cent. under fourteen years. The average weekly wages were \$2.69. The inquiry further showed that 31 per cent. had attended public schools and 58 per cent. parochial schools exclusively, and nearly 11 per cent. had attended both of these classes of schools. Also that 82 per cent. were born in the United States and 18 per cent. in foreign countries. That 72 per cent. reported the occupation of the father as that of common laborer, and 28 per cent. as that of one or the other of the skilled trades; that in 60 per cent. of the cases of the 1,216 children who appeared young or weak, and whose homes were visited, the parents owned their home and some other property besides; that of 46 per cent. the father had regular employment; that of 21 per cent. the father was dead; and that of 32 per cent. the father was either sick or out of employment.

Wisconsin, it is said, makes one fourth of the cheese produced in the country; there are 2,000 cheese factories and 1,000 creameries. Green County, which has a large Swiss population, sold \$1,200,000 worth of cheese in 1900.

The report of the Game Warden gives the following data: In 1900 were issued 32,037 hunting licenses, of which 231 were to nonresidents; the license fees aggregated \$32,316, a decrease of \$3,500 from the year preceding. More deer were killed—2,568 shipped in 1900 and 1,953 in 1899; nonresidents killed 104 this year. Of 342 persons arrested for violating the game laws, all but 21 were convicted; fines collected amounted to \$4,800; and there were 190 seizures of nets, spears, etc. Twelve persons lost their lives by being mistaken for deer, and 12 others were seriously wounded.

The last Legislature appropriated \$25,000 for an exhibit at the Pan-American Exposition; the Governor appointed a board of managers, which was organized in March, with W. A. Van Brunt as president and C. E. Reynolds secretary.

Lands.—The area of public land in the State unappropriated and unreserved but surveyed, is given as 313,565 acres; the area reserved, 365,353; and appropriated, 34,595,962. In the fiscal term ending Sept. 30, 1898, the agents sold 63,293 acres of State lands for \$211,871, and it was estimated that those remaining unsold were worth only about \$500,000. The fund from all that have been sold amounts to about \$3,000,000. School districts can borrow from it to build schoolhouses, the limit being 5 per cent. of the valuation of real property in the district, and the time allowed for payment fifteen years.

The Forest Warden reported that there were 99 forest fires in 1900, affecting 163 persons and causing a loss of \$23,906. The cost of extinguishing them was \$1,426. In 1899 there were only 46 fires, involving a property loss of \$1,705 and affecting 14 persons, while the cost of extinguishing them was \$502.97.

Decisions on Laws.—The legislative act providing that process may be served on private corporations by leaving copy with register of deeds has been pronounced unconstitutional as taking property without due process of law.

Doubt having arisen as to the construction of the law for taxing inheritances passed at the last session of the Legislature, in view of the decision of the United States Supreme Court that the Federal law does not impose a tax unless a legacy amounts to \$10,000, although the personal estate may exceed that amount, the State Attorney-General gave the opinion that the Wisconsin law makes legacies taxable when less than \$10,000, if the total value of the estate is more than \$10,000.

Political.—The State election took place in November. There were five tickets—Republican, Democratic, Prohibition, Social-Democratic, and Socialist-Labor.

The Republicans chose delegates to the national convention and presidential electors at large at their first convention, April 25, in Milwaukee.

The second Republican convention was held in Milwaukee, Aug. 8. Eight names had been mentioned for the gubernatorial nomination, and there were 6 avowed candidates—R. M. La Follette, E. M. Rogers, J. M. Whitehead, A. M. Jones, I. B. Bradford, and De W. Stebbins—but before the end of July all except Mr. La Follette had withdrawn. This was a great surprise, as Mr. La Follette has been out of harmony with his party for some time—at least with its leaders in the State—his ideas on politics and economics being deemed too radical. He was nominated by acclamation, and the present incumbents of the other State offices were renominated without opposition. The platform declared in favor of some of the changes in State law which Mr. La Follette has most earnestly advocated, notably the nomination of candidates by primary election and the abolition of caucuses and conventions. It said:

"We indorse the administration of Gov. Scofield and the other present State officers as clean, capable, and businesslike; and heartily commend its efforts toward carrying out the pledges of the Republican State platform adopted at the convention of 1898.

"We recommend that caucuses and conventions for the nomination of candidates for office be abolished by legislative enactment, and that all candidates for State, legislative, congressional, and county offices be nominated at primary elections upon the same day, by direct vote, under the Australian ballot.

"The establishment by the last Republican Legislature of a State tax commission for the purpose of an exhaustive investigation of the complicated questions of taxation was in accordance with the principles of sound public policy.

"The growth and development of business and commercial affairs require and necessitate large aggregations of capital, and great enterprises may be honestly and fairly conducted, with legitimate profits to investment and substantial good to the community; but combinations and trusts that destroy competition, restrain trade, and create monopolies should be prohibited by law; and we demand the enactment of such legislation, State and national, as shall render these abuses impossible.

"We believe that the demand for better highways, made by the farmers of Wisconsin, should be encouraged by the State, as favoring an improvement of great practical value to the agricultural interests."

Following is the ticket: For Governor, Robert M. La Follette; Lieutenant Governor, Jesse Stone; Secretary of State, William H. Froehlich; State Treasurer, James O. Davidson; Attorney-General, Emmett R. Hicks; State Superintendent, Lorenzo P. Harvey; Railroad Commissioner, Graham L. Rice; Insurance Commissioner, Emil Giljohann;

Chairman of State Central Committee, Gen. George E. Bryant.

The Democratic State Convention met in Milwaukee, June 12, chose delegates to the national convention, and adopted resolutions on national issues, approving the Chicago platform, expressing love for and devotion to Mr. Bryan, and denouncing "the Republican party for its brazen inconsistency in treating Porto Rico as a part of our territorial possession, and at the same time unjustly discriminating against its people, as well as our own, by imposing a burden of tariff, in express violation of the Constitution of our country; in establishing a system of imperialism repugnant to the spirit of our institutions, and necessitating the maintenance of a system of militarism that threatens the perpetuity of our Government, for the sole purpose of gain and conquest; in establishing for all time a scheme of taxation under the guise of war taxes, for the purpose of maintaining a standing army, at a time when peace should prevail, and providing revenue made necessary by a policy of exorbitant and prohibitory tariff impositions, practiced in the interests of monopolies and trust combinations, that have been fostered by the present administration; in the profligate and corrupt use of the public funds in fraudulent army contracts, and the purchase of war vessels; and we point to the gigantic postal frauds in Cuba as a fair sample of Republican integrity."

The remaining paragraphs condemned trusts, favored election of United States Senators by direct vote, and expressed sympathy for the Boers.

The second Democratic convention, in Milwaukee, Aug. 22, named the following candidates: For Governor, L. G. Bohmrich; Lieutenant Governor, Thomas Patterson; Secretary of State, J. H. Woodnorth; State Treasurer, August Bartz; Attorney-General, G. C. Cooper; State Superintendent, Homer B. Hubbell; Insurance Commissioner, G. W. Hill; Chairman State Central Committee, A. D. Warden.

Twelve presidential electors were also nominated.

The platform repeated the declarations of the June convention on national issues. In regard to two of the four constitutional amendments that were passed by the Legislature of 1899 and will come before that of 1901 before being submitted to the people, it said:

"We are opposed to joint resolution No. 13 proposing an amendment to Article XI of the Constitution of Wisconsin, giving the Legislature power to pass a general banking law, and believe that the people should continue to be vested with the ultimate power to vote upon the passage of any banking law.

"We are opposed to joint resolution No. 16, proposing an amendment to section 1 of Article X of the Constitution of the State of Wisconsin, relating to education. This proposed amendment is in conflict with the recently expressed vote of the people as to the supervision of public instruction, and opens the way for the vesting of the control of the public schools arbitrarily in the hands of the State Superintendent and the taking away from the people of the various counties the election of county superintendent."

A convention of the People's party was held in Milwaukee, Aug. 22. The nominations of the Democratic party for presidential electors were adopted, and the convention decided not to put out a State ticket. Besides approving the national party platform, the resolutions demanded abolition of monopoly in money, transportation, and land; direct legislation known as initiative and referendum; public control of public utilities,

national, State, and local; a primary election law; the issue of all money by Government directly through the Government banks; abolition of the arbitrary power assumed by judges in granting injunctions; a legal eight-hour work day; municipal home rule; and the abolition of prison contract and child labor.

The Prohibitionists met in convention in Madison, Aug. 22, and adopted a platform in line with the party principles, approving the national candidates, and saying:

"We declare that no substantial reform can be made by legislative enactment for

purer primary and general elections so long as the saloon debauches the citizen and breeds the purchasable voter. Break down the rum traffic, elevate manhood, and a sober citizenship will give us an honest ballot.

"We are in favor of equal and just taxation, and as the first step to this end we demand the repeal of the present license laws of this State, which take more than \$2,000,000 from the wives and children of drunkards, that should be levied upon the property instead of the poverty of our people. This can only be done by the enactment of a prohibitory law in place of the license system, which is wrong in principle, vicious in theory, and a failure in practice."

The ticket follows: For Governor, J. B. Smith; Lieutenant Governor, T. K. Torvildsen; Secretary of State, Edwin Kerswill; State Treasurer, H. J. Noyes; Attorney-General, E. W. Chafin; Superintendent of Public Instruction, H. C. Senn; Railroad Commissioner, V. M. Weeks; Insurance Commissioner, F. R. Derrick; Chairman of State Central Committee, J. E. Clayton.

Howard Tuttle was nominated for Governor by the Social-Democrats, who met in convention in Milwaukee, Sept. 1.

The election gave the offices to the Republican candidates. The vote for Governor stood: La Follette, 264,420; Bohmrich, 160,674; Smith, 9,712; Tuttle, 6,590; Wilke, Socialist-Labor, 7,095. The Legislature will consist of 31 Republicans in the Senate and 81 in the House, and 2 Democrats in the Senate and 19 in the House.

The presidential vote was: McKinley, 265,916; Bryan, 159,284; Woolley, 10,124; Debs, 7,095; Malloney, 524.

WYOMING, a Northwestern State, admitted to the Union July 10, 1890; area, 97,890 square miles. Population in 1890, 60,705; in 1900, 92,531. Capital, Cheyenne.

Government.—The following were the State officers during the year: Governor, De Forest Richards; Secretary of State, F. Chatterton; Treasurer, G. E. Abbott; Auditor, Leroy Grant; Adjutant General, Frank A. Stitzer; Attorney-General, J. A. Van Orsdel; Superintendent of Education, T. T. Tynan; Supreme Court, Chief



ROBERT M. LA FOLLETTE,
GOVERNOR OF WISCONSIN.

Justice, C. N. Potter, Republican; Associate Justices, Samuel T. Corn, Democrat, and Jesse Knight, Republican; Clerk, R. C. Morris.

Population.—The population of the State, by counties, in 1900, according to the Federal census, was as follows: Albany, 13,084; Bighorn, 4,328; Carbon, 9,589; Converse, 3,337; Crook, 3,137; Fremont, 5,357; Johnson, 2,361; Laramie, 20,181; Natrona, 1,785; Sheridan, 5,122; Sweetwater, 8,455; Uinta, 12,223; Weston, 3,203; Yellowstone National Park, 369.

Finances.—The Treasurer's statement of Sept. 30, 1900, shows a net balance in the general fund, after allowing for outstanding warrants, of \$22,304.43, a net gain of \$25,992.44 over 1898. The Treasurer's cash statement is as follows: Cash balance, Oct. 1, 1898, \$103,785.69; receipts from all sources, \$714,135.21; investments repaid, \$42,107.16; disbursements, \$625,195.82; investments, \$63,147.16; cash balance, Sept. 30, 1900, \$171,685.08. This shows a gain in the cash balance of \$67,949.39 over the cash balance of 1898.

The details of State expenditure for the fiscal year ending Sept. 30, 1900, show, among other items, the following: Care of convicts, juvenile delinquents, and deaf, dumb, and blind, \$29,079.54; insane, \$17,278.58; Soldiers' and Sailors' Home, \$5,234.38; Wyoming General Hospital, \$12,894.49; university, \$8,726.51; interest State bonded debt, \$19,200.

Valuation and Taxation.—The Treasurer's report shows the total valuation of property within the State in 1900 to be \$37,892,303.81; number of cattle 359,069, valuation \$6,154,640.05; number of sheep 2,624,689, valuation \$5,426,493.25. The taxes levied in 1900 were as follow: State, \$227,510.13; county, \$280,771.12; general school, \$48,381.13; interest on county bonds, \$80,293.32; library, \$4,054.36; judgment and State deficiency, \$14,000.97; special school, \$159,925.61; payment school bond interest, \$19,454.58; payment county bonds, \$19,172.11; total, \$853,563.23.

State Lands.—The rentals for the State lands increased from \$22,268.69 in 1892 to \$91,589.81

in 1900, the great increase having occurred during the past two years, viz., from \$40,684.07 in 1898 to \$91,589.81 in 1900. The State owns 3,001,905.48 acres of school sections, being sections 16 and 36 in each township. Of this amount, 918,054.47 acres have been leased, 553,477.93 during the past two years.

Education.—The report of the Superintendent of Public Instruction shows that in the past two years 524 schools were maintained, and more than 14,000 pupils received instruction.

Soldiers' and Sailors' Home.—Since the establishment of this institution, in 1895, 71 persons have been admitted. The present membership is 21; the gain during the year by admission and readmission was 18; the loss from various causes was 13. The average attendance of men for the year was 21.25; women, 2.66. The average cost of maintenance per capita for the year ending Sept. 30, 1898, was \$288.85. The average cost for the past year was \$211.56. The total cost of maintenance for the past year was \$5,234.38. Of this amount, \$1,507 was received from the General Government.

Penitentiary.—The average daily number of all convicts, State and Federal, and the total net cost for care and maintenance of them during the past five years, are as follow: In 1895, 107.38 convicts, cost \$5,193.97; in 1896, 111.68 convicts, cost \$22,841.15; in 1897, 120.47 convicts, cost \$23,576.60; in 1898, 136.11 convicts, cost \$22,064.21; in 1899, 144.48 convicts, cost \$25,604.41. In 1900 56 new prisoners were admitted to the Penitentiary.

Coal Mining.—The State Inspector of Coal Mines reports the output of the mines of Wyoming as 3,777,487 tons in 1899. Seven new mines have been opened recently.

Political.—At the presidential election the Republican ticket received 14,517 votes; the Democratic-Populist, 10,298. The vote for Congressman was: Mondell, Republican, 14,539; Thompson, Democrat, 10,017. The Legislature consists of 18 Republicans in the Senate and 37 in the House, 1 Democrat in the Senate and 2 in the House.

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YACHTING. Yachting antedates in antiquity most of the sports and recreations of the present day, but its development naturally has been most noticeable during the century just closed, when popular pastimes have kept pace with the enormous growth of moneyed interests, and everything social and political has advanced with a rapidity not heretofore known in the history of the world. Evidences are not wanting that pleasure craft, propelled by oars or sails, were used by the earliest maritime peoples known to history, and mention is even made of such craft in the semimythical legends of prehistoric times. It is but a few years since a sumptuous houseboat (or whatever may have been the Roman equivalent for the term) was discovered at the bottom of an Italian lake, and it now adorns a neighboring resort for the instruction of the passing throng.

It appears in Pepys's Diary that in January, 1660, one Commissioner Pett, a shipbuilder of Deptford, England, was building for Charles II a vessel described as a yacht, and that in July of the same year a Dutch sailing yacht lay in the Thames below London Bridge, and was visited by his Majesty, who did it the honor to dine on board. Subsequently the King defeated his Dutch visitor, and likewise at the same time his brother, the Duke of York, in a sailing match from Green-

wich to Gravesend and back, the stake being 100 guineas. This is the first stated yacht race of record in British waters.

It is not here intended to relate in detail the history of this luxurious and costly recreation. In England, as has been seen, it had its beginnings under the patronage of the "Merry Monarch"; and while it probably had its periods of depression during the reaction that followed his extravagant reign, it reasserted itself shortly afterward, and by 1720 the first yacht club was established at Cork, Ireland. The Royal Yacht Club followed in due course at Cowes, England, being organized in 1812 with 50 members. At about the same time wealthy American gentlemen, notably the more prominent among merchants and shipowners, were afloat in handsome sailing craft richly furnished and equipped, some of which did valiant service as privateers in the sea wars that followed.

The first regularly organized American yachting association was the New York Yacht Club, established in 1844 with 9 members, Commodore John C. Stevens, Esq., being commodore. This grew out of the Hoboken club, whose fleet consisted mainly of sailboats and is hardly to be recognized as a regular yacht club. The first stated match was sailed by the club fleet from Robbin's Reef, within

New York harbor, as a starting point, to and around the Southwest Spit Lightship and return, the schooner *Cygnets* being the winner.

In 1851 occurred the picturesque series of incidents that led to what are now known as the international races, and won for American sailing yachts a supremacy which they have since retained. Often as the story of the schooner *America* has been told, there is a popular demand for its repetition whenever a cup race is expected. Therefore, as this paper must needs refer to two such races, a brief summary seems to be called for here. The *America* was designed and built by George Steers, and, representing the New York Yacht Club, sailed for England under the command of John C. Stevens, commodore of the club. She so utterly defeated and outmaneuvered not only the whole Royal Yacht Squadron, but every sailing vessel that could be brought against her, that by common consent she was recognized as the swiftest sailing yacht in existence. She was awarded the silver cup that bears her name and is regarded as the highest existing prize open to competition among amateur sailors. Her sail plan and the model of her hull revolutionized the ideas of English builders, and twenty years passed before a challenge was sent across the ocean and an effort made to win back the cup, and with it the formerly acknowledged supremacy of British yachts.

A beginning once made, other challenges and contests have followed at irregular intervals, to the number of 10, resulting in every instance in victory for the American contestants. Disagreements and misunderstandings have arisen from time to time, and controversies about the racing conditions have occasionally waxed so bitter as to threaten all possible friendly relations; but it is believed that a mutual understanding has now been reached which, with the good faith that may be presumed for both sides, should prevent any serious dispute in the future.

The subject of yachting was last treated in the *Annual Cyclopædia* in 1896. At that time, owing to the inconsiderate and unwarrantable course of Lord Dunraven during his contest for the *America's* cup, it was generally believed on both sides of the ocean that many years must pass before another challenge would be authorized by any British yacht club; for, while to Americans the case, after a most careful investigation, seemed to be clear against the plaintiff, it was far otherwise in England, and it was not considered possible that what many Englishmen regarded as an affront to a British nobleman would be soon forgotten or overlooked. A fresh challenge came, however, far sooner than was expected.

In 1897 it became evident that "mug hunting" was assuming an overruling prominence not altogether to be commended. The fun and good fellowship encouraged by scrub races and friendly maneuvering while sailing for pleasure were crowded out and discouraged by the racing machines, whose owners shunned every contest unless the conditions were such as to favor their individual boats. This state of things was further fostered by those yachtsmen and sailors of smaller craft who, favored by large means, were able to build and equip a new boat, or perhaps more than one, for every racing season, embracing all the improvements that had been devised in the meantime, and thus gaining an advantage hardly to be estimated over their less favored rivals.

In the smaller classes there were some fine contests. An exciting series of trial races off Oyster Bay, Long Island, resulted in the choice of *Momo*, designed and sailed by Clinton Crane, to try and

bring back the *Seawanhaka*-Corinthian challenge cup, won by the Canadians in 1866. The Canadian defender was *Glencairn II*, built and sailed by Mr. H. Duggan. She was successful in her defense, and the cup remained in Canadian hands, and Mr. Duggan was universally recognized as a designer of remarkable ingenuity and as a sailor of the highest skill.

In the large schooner class there were exciting contests between the *Emerald* and *Colonia*, two large vessels of modern build and rig, which were considered the finest type of their class. *Colonia* was the winner in the larger number of trials.

Off Newport a series of races occurred between the *Sycc* (F. M. Hoyt, owner) and the *Vencedor* (H. M. Gillig), both cutters about 50 feet in length. The last-named vessel was brought from the Great Lakes, where she had beaten everything in her class, to try conclusions with her salt-water sisters. She was badly beaten, owing largely to a series of unlucky mishaps, and she has since been taken back overland to her native element, the fresh-water seas.

In 1898, owing to the war with Spain, yachting in American waters was reduced almost to its lowest terms. All the principal harbors along the coast were very properly planted with defensive systems of mines and torpedoes, and the vigilance of guard ships, patrol boats, and cruisers interfered sadly with the freedom of the seas as regards the convenience of pleasure craft. For these reasons the annual summer cruises of the large yacht clubs were omitted. It is noteworthy, however, that 28 large steam yachts were purchased by the Government and converted into gunboats, some of which rendered distinguished service in action. Notable among these was the *Gloucester*, formerly the *Corsair*, which under the command of Lieut. Richard Wainwright did not hesitate to engage at close quarters two Spanish "destroyers," both of which were sent to the bottom in short order, though not entirely, perhaps, by the yacht's guns. Many yachtsmen, too, entered the service, some of them as officers, but more as enlisted men, in the regular navy as well as in the reserves, their training in amateur seamanship having qualified them for posts of responsibility and danger.

While all this very naturally interfered temporarily with yachting in its more pacific aspects, it tended to develop the single-hand cruiser classes by taking out of the way the temptation of larger and more luxurious craft. The small boat has always been the true training school for efficient seamanship and all-round usefulness among sailor men.

On Aug. 6 the New York Yacht Club received preliminary notice of a challenge for the *America's* cup from the Royal Ulster Yacht Club of Ireland, in behalf of Sir Thomas Lipton, a wealthy tea merchant. It was subsequently arranged that the races should take place in early October of 1899, that season of the year being chosen as more likely to afford favorable conditions of wind and weather than usually prevail at an earlier date.

The races for the *Seawanhaka* challenge cup were sailed, after the usual trials for the selection of the swiftest boat, near Montreal; the contestants were the *Dominion*, built and sailed by H. Duggan for Canada, and the *Challenger*, Clinton Crane, for the United States. The Canadian won in all but one of the races, and that was lost only because he ran foul of his antagonist. Owing, however, to the peculiar construction of the Canadian boat, something approximating the double-hull idea of a catamaran, much indignation was expressed on the part of the *Challenger*, and

Mr. Duggan's position was by no means unaniously sustained even by his own countrymen. Yet the cup indisputably remained in Canada.

The yachting event of 1899 overshadowing all others in popular interest was the series of races for the America's cup, sailed off New York harbor, beginning Oct. 3, and ending with a victory for the American boat on Oct. 21. The contestants were the Shamrock, Sir Thomas Lipton owner, designed and built by Mr. Fife, at the Clyde shipyards, and the Columbia, owned by a syndicate of American yachtsmen and designed and built by the Herreshoff Brothers, of Bristol, R. I. In general dimensions the two boats were so nearly identical that to the average reader a printed description of them would convey an idea of very little difference; but in actual appearance the American was far more graceful and seemed more capable of slipping easily through the water under the impulse of her immense spread of canvas than did her speedy rival, equipped though she was with what was almost universally considered a better set of sails. That the American spars were capable of bearing all reasonable strains the result proved, for no serious accident befell her in this respect, while the Shamrock carried away her topmast under not very severe conditions during the second race.

Contrary to the hopes of all who were interested, the season of the year proved quite as baffling in regard to wind as earlier dates had proved in former races. Before the three races called for by the conditions could be sailed the yachts were brought to the starting line eleven times, but in the end the American boat justified the hopes of her builders and owners by winning handsomely in every instance.

One notable feature of the races this year was the very largely increased expenditure in equipment and tuning up of the respective craft. Sir Thomas Lipton not only incurred the very heavy expense of bringing his boat across the Atlantic properly rigged for the encounter of heavy weather, but she was accompanied by a steam tender, which remained with her throughout the season, serving as quarters for the crew and for Sir Thomas and his friends, and being fitted up in effect as a floating machine shop capable of effecting almost any repairs that might become necessary. On the part of the Americans, the Government took steps to preserve order during the races, and one of the most efficient fighting officers in the service, Capt. Robley D. Evans, was placed in command of a large fleet of armed launches and gunboats, which kept all excursion steamers and other craft out of the way of the racers. Not even Englishmen disposed to find all possible occasion for complaint ventured to make any protest as to the management in this regard.

Sir Thomas Lipton made friends of all with whom he came in contact, accepting his defeat with good nature and frankly admitting that the Columbia was the better boat.

It must be remembered that to some extent the challenging party in these international races is handicapped by the provision requiring him to bring his boat across the Atlantic Ocean on her own bottom, thus prohibiting the possibility of transporting a flimsily built racing machine across the dangerous waters on the deck of an ocean steamer. At first glance the condition seems fair, and it is not seen how it can reasonably be objected to; still it must be confessed that there is a suspicion of disadvantage inseparable from the idea of pitting a boat that has actually crossed the ocean against one that in all probability never will be required to go out of sight of land.

The Canadians won in the international match for half raters, the Glencairn III, of the Royal St. Lawrence Yacht Club, defeating the Constance, of the Seawanhakas (New York).

In 1900 the usual international contest between half raters took place on Lake St. Louis, St. Lawrence river, early in August. The Canadian defender was the Red Coat, of the Royal St. Lawrence Yacht Club, and the challenger was the Minnesota, of the White Bear Club, of St. Paul, Minn. The victory remained, as before, with the Canadian.

In the reasonable hope that the next challenge for the America's cup would permit the building of smaller boats for the contestants, a "70-foot" class was created, and fairly satisfactory results were obtained, the yachts being nearly as fast as the great 90-foot racers, and involving so much less expense and trouble that it was believed that the general interests of the sport would be furthered thereby.

These hopes proved vain, however, for on Oct. 2 a challenge was received in due form from Sir Thomas Lipton, through the Royal Ulster Club. This was accepted, and the conditions agreed upon in 1898 were re-enacted with slight amendments. The first race is fixed for Aug. 20, 1901, the others to follow as rapidly as possible provided there is wind enough to sail. At this writing the prospective contestants are in course of construction—larger, costlier, and more strictly racing machines than any of their predecessors.

YUKON, TERRITORY OF, a northwestern territory of the Dominion of Canada; population in 1900, 15,500.

Government and Regulations.—The Canadian district of Yukon was constituted a separate territory, under control of the Minister of the Interior, at Ottawa, with the name of the Yukon Territory, in 1898. The first Commissioner, appointed on July 4 of that year, was William Ogilvie. He has associated with him as an Executive Council the following officials: A. B. Perry, Superintendent of the Northwest Police; A. C. Senkler, Gold Commissioner; J. E. Girouard, Registrar of Lands; Mr. Justice Dugas, *ex officio*; W. H. P. Clement, Legal Adviser. In July, 1900, arrangements made by the Dominion Government for local elected representatives in the Council marked the first step of a self-governing community, and in the parliamentary session of the same year the Government at Ottawa, while refusing to support Sir Charles Tupper's motion for an immediate grant of representation to the territory, announced that it would be given before long. On Aug. 17 a large number of changes and amendments in the land, mining, and timber regulations of the Executive Council were announced. They included and dealt with river-dredging leases, placer-mining conditions, hydraulic-mining leases, the recent discoveries of coal, mining disputes, and certificates to miners.

Expense of Government.—The expenditure from the Consolidated fund of Canada in behalf of the Yukon Territory is officially given as \$47,027 in 1898, and \$1,098,379 in 1899. To this latter sum must be added federal expenditures out of ordinary revenue of \$12,647 upon the administration of justice; \$387,764 upon militia—practically the maintenance of the mounted police; \$68,619 upon public works; \$55,953 upon railways; \$28,932 upon the customs; \$21,950 upon postal facilities. The local revenue accruing to the Dominion Government in 1899 included \$575,813 from gold royalties; \$227,354 from miners' certificates; \$262,020 from placer grants, renewals, etc.; \$36,006 from mining fees; \$44,396 from land rentals;

\$54,098 from timber dues; \$482,099 from customs. The total, including various miscellaneous items, was \$1,753,376.

Reforms.—On Aug. 14 the Earl and Countess of Minto arrived at Dawson City on a vice-regal tour. A voluminous memorial, presented to his Excellency by the Citizens' Committee, set forth at length the position and troubles of the population and their requirements and complaints against the Government. The summary and conclusion of this document were as follow:

"Wherefore your petitioners pray that your Excellency will take means to bring before your advisers and the Parliament of Canada:

"1. The necessity for immediately doing away with, or at least greatly reducing, the present royalty tax on gold mined in the Yukon Territory.

"2. The necessity of preparing roads and bridges and affording free means of communication within the Yukon Territory.

"3. The necessity of opening for location to free miners parts of the Yukon Territory owned by the Government which are fit for placer mining.

"4. The necessity for reducing the present fees for free miners' certificates and for recording and renewing placer-mining claims.

"5. The necessity for altering the hydraulic-mining regulations so as to secure for the free miner the right to locate, record, and work any ground which is fit for placer mining, whether covered by a concession or not.

"6. The adoption and enforcement of such mining regulations as will encourage to the utmost the prospector first, the miner second, and the investor third, and throw open the country for the fullest and freest development.

"7. The necessity of granting representation to the people of the Yukon by at least two members in the House of Commons of Canada.

"8. A legislative council wholly elected by the citizens of the Yukon Territory.

"9. The necessity of putting the liquor trade of this territory under such regulations as to subject it to the laws of trade and insure commercial freedom.

"10. Establishment of proper courts and a court of appeal in and for the Yukon Territory.

"11. The necessity of securing or establishing a free British port of entry on the western coast of America within reach of the head waters of the Yukon river, in order to encourage the trade and commerce between the Yukon Territory and the other portions of the Dominion of Canada."

Lord Minto answered: "As the constitutional representative of her Majesty, you are well aware that I have no direct voice in the legislative affairs of the Dominion; but I must say that I believe I shall be able to make such suggestions as a result of this visit that great good to the country will accrue therefrom." The Dawson Board of Trade, on July 17, had passed the following:



PANNING ON THE ELDORADO.

"Whereas, the Yukon Territory is without representation in the House of Commons of Canada and is administered by officials of the Government of Canada; and whereas, the wishes and interests of the people of the Yukon Territory are not represented in any parliamentary or legislative body making laws or regulations for the governing of the Yukon Territory; and whereas, the development of the Yukon Territory is dependent upon the development of the mining industry in said territory, and the discovery of rich mining areas converts what has hitherto been wasted and valueless portions of this territory into great resources of wealth, not only to this territory but the Dominion of Canada as a whole; and whereas, the greatness of the resources of the Yukon Territory

are undoubted, and the certainty of an ever-increasing population assured, if the territory is granted wiser and proper administration and laws; and whereas, the richer portions of gold placer claims on Bonanza and Eldorado creeks have been largely worked out and the mining industry is no longer able to bear the burdensome restrictions and imposts now levied, and the existing adminis-

view of the great expenses connected with the opening up and government of a new and very distant country. As Dawson grew into an organized town and the territory into a region of stable law and settled administration, the vague complaints and incoherent discontents of the pioneer period took form, and on July 17, 1900, the Dawson Board of Trade formally petitioned the Gold



A DOG TEAM ON THE WHITE PASS TRAIL.

tration and regulations must be promptly remedied in order to avert financial disaster to the territory; and whereas, the true condition of the mining industry and the necessities of the Yukon Territory are but little known in eastern Canada, and the Parliament and Government of Canada have not hitherto appeared to be fully informed in regard to the said conditions and necessities (or, if so, heedless of the results), and the laws and regulations enacted by said Parliament and Government for the governing of special industries of the Yukon Territory, and should be immediately changed; now, therefore, be it resolved, that the board of trustees do take immediate steps to raise a fund of \$50,000 to be used as the board of trustees shall direct, to place before Parliament and the people of Canada the true position of industries, resources, and administration of the Yukon Territory, and to obtain such necessary reforms in the present regulations, law, and administration as to insure the development and prosperity of the Yukon Territory."

Mining Royalties.—The situation in the Yukon during the past few years in connection with Government royalties upon minerals has been peculiar. As an inevitable ground for complaint and dissatisfaction among a large and floating population of ignorant miners, it has interjected an issue into the politics and Parliament of the Dominion. The original royalty was imposed in

Commissioner for the abolition of the royalty and the substitution of an export duty not exceeding 2 per cent. on all the gold taken out of the country. Between 1896 and 1898 there was an influx of about 30,000 persons into the territory.

Altogether, the annual revenues of the Dominion derived from taxes, royalties, and customs duties in the Yukon are placed at \$2,000,000.

Mines and Minerals.—The gold production of the Yukon is officially placed at an average of about \$100,000 a year between 1885 and 1896. In 1896 it was \$300,000; in 1897, \$2,500,000; in 1898, \$10,000,000; and in 1899, \$16,000,000. The actual production during the past three years has been probably at least \$20,000,000 annually, as much gold dust is carried away without record.

Miscellaneous.—Early in May the result of the first Yukon census was announced. It showed a total population of 13,000 men, 2,000 women, 500 children. Of these, 4,500 were British subjects, 9,000 Americans, 330 Indians. In the Klondike region itself there were 8,805 persons, including 2,767 British subjects, 5,539 Americans, and 499 of other nationalities. The population of Dawson was put at 5,404. In September, 1900, gold dust dropped in value about \$1 an ounce, and the commercial current price, which had been \$17 in 1896 and became \$16 in 1898, was placed at \$15 by the Dawson Board of Trade, owing to continued intermixture with black sand.

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